

Project Outline ~ Information Technology

Project Code	IT_SAND_1	
Project Details	Internship Category	Sandwich
	Internship Period	June 2018 to May 2019
	Preferred Disciplines	First Preference: Business/Information Technology Other Preference: Computer Science, Engineering
	Project Name	Data Analytics Solution
	Business Objective(s)	<ul style="list-style-type: none"> Fully participate in the project management and implementation of enterprise solution projects, that covers wide range of business exposures across different functions including, Finance, Human Resources, Contract & Procurement, etc. Fully participate the project management and implementation of data analytics solution projects, that covers wide range of business exposures across different functions including Finance, Human Resources, Contract & Procurement etc.
	Project Descriptions	<ul style="list-style-type: none"> Bring the business into new era of operation by introducing latest state-of-art technology (eg. Business Data Analytics, Big Data, etc.) to fit for their requirements and pain points Work alongside with our IT professionals with +5 years of experience from numerous industries and disciplines such as finance industry, consulting firms, insurance companies, etc. in going through the implementation life-cycle of different IT projects on Data Analytics Solution System, which facilitates the company to perform better decision making Provide professional IT consultancy service to business units and act as IT ambassador on relationship management Through a variety of on the job training and structured development opportunities, candidate will learn from some of the best technology strategy and practice in the industry, which is an excellent platform for candidate to begin a career in IT. Through a team of committed management and IT professional who can provide valuable advices and support to the career development, coaching and networking, on top of the fantastic opportunities that the candidate will have every day.
Project Deliverables	<ul style="list-style-type: none"> To enhance business processes and operational efficiency by developing new applications leveraging the latest data 	

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		<p>analytics technologies</p> <ul style="list-style-type: none"> • Participate project with proof of concepts using the newest dashboard technology Tableau, Power BI and Cloud technology • Participate in the evaluation and research process for the adoption of the latest technology for analytics purposes • Management presentations on the status and achievement for the above initiatives • Project development life-cycle initiatives. • Project deliverables for the intern achievements <ul style="list-style-type: none"> ○ Conducted exploratory data analysis for senior management decision making and performance reviews ○ Coordinated events for external companies and international guests to share on analytics ○ Developed company-wide analytics solution offered to +5000 staff
	<p>Required Skills</p>	<ul style="list-style-type: none"> • Microsoft Excel, Computer Science (preferred) • Proven problem solving skills • Innovative, self-motivated and willing to learn new technology • Strong communication and interpersonal skills
	<p>Learning</p>	<ul style="list-style-type: none"> • In-depth business and technical knowledge that is necessary for an outstanding IT professional after graduation • Tactics and skills in driving a business initiative into an IT project, such as business requirements collection, business cases preparation

Project Code	IT_SAND_10	
Project Details	Internship Category	Sandwich
	Internship Period	June 2019 to May 2020
	Preferred Disciplines	First Preference: Communication Other Preference: Marketing / Business
	Project Name	Technology adoption with culture transformation in the digital workplace
	Business Objective(s)	<ul style="list-style-type: none"> • Group IT - be a vital business partner, providing information technology that adds value to CLP to achieve utility industry leadership. • We focus on delivering strategic change management advise, plan and execution initiatives for CLP staffs to understand the value of the change and be engaged throughout the technology adoption and culture transformation journey in the whole organisation • The culture and behavioural change initiatives via change management strategic communication and relevant activities will help CLP staffs to: <ul style="list-style-type: none"> ○ increase the awareness about the nature, need, reason(s) and business benefits of the change throughout technology adoption journey ○ become more confident in Support and participate in the change journey ○ become more Proactive in Learn to pick up the
Project Descriptions	<ul style="list-style-type: none"> • The project focuses on delivering user-centric initiatives along with the IT technology solutions rollout plan including: <ul style="list-style-type: none"> ○ Communication - Change Management plan building with visualised. communication deliverables via email broadcast, digital signage, posters, leaflet, brochures, merchandises, survey and feedback management, etc. ○ Learning & Training - self-help materials, interactive online learning platform, hands on experience with demo via small group sessions, etc. ○ Behavioural Embedment - Change Champions / Rangers network, Discovery sessions, Deep Dive Workshops, Roadshow, Open Day etc. ○ Floor walk/Roadshow/Open Day - Gamification elements, communication with face to face 	

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		<p>interaction with , etc.</p> <ul style="list-style-type: none"> ○ Engagement - Change Champions/Rangers network communication and collaboration sessions, etc.
	<p>Project Deliverables</p>	<ul style="list-style-type: none"> • design and deliver relevant culture / behavioural initiatives to equip staff with the necessary info. in know and understand the content, reasons and benefits of the change, and know where to access and how to pick up the knowledge and skill to adopt the new technologies • Support the design, build and implementation of change management plan. along the technology rollout Plan with tasks and activities including takeholder engagement, impact Assessment, training, communications, business alignment, etc. • Design and Develop related stakeholders engagement visualised communication materials, slides for CLP staffs briefing, content for broadcasts, digital signage, gamification with interactive elements via Online channels, etc.
	<p>Required Skills</p>	<ul style="list-style-type: none"> • Technology related:- Office tools (i.e. Microsoft Word, PowerPoint, Excel, etc.). • Multimedia tools (i.e. Graphics, photo and video editing, etc.) • Collaboration tools (i.e. Skype, OneDrive, SharePoint, etc.) • Social media tools (i.e. Twitter, Facebook, Yammer, etc.). Non-technology related: • with the sense of aesthetics • with passion, 'Can-do' and willing to learn attitude • willing to communicate with people in proactive ways • proficient in both English and Chinese
	<p>Learning</p>	<ul style="list-style-type: none"> • This role is for those who are looking for an opportunity to challenge yourself, strengthen your professional capabilities or even bring value to CLP. During your internship program with Customer Experience team, you will have the opportunity to learn models within business context / environment- Strategic thinking / business acumen to achieve intended outcomes.

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Project Code	IT_SAND_11	
Project Details	Internship Category	Sandwich
	Internship Period	June 2019 to May 2020
	Preferred Disciplines	First Preference: Computer Science, Computer Studies, Information System Other Preference: Business Technology
	Project Name	Productivity improvement
	Business Objective(s)	<ul style="list-style-type: none"> To improve the user experience and collaboration efficiency Improve the existing End User Computing , Intranet and meeting room technology to ensure they are not rely on obsoleted technology. Define enterprise content management roadmap ITSM process improvement to strengthen IT operation and support.
	Project Descriptions	<ul style="list-style-type: none"> Projects include a variety of IT implementations in a different technology domains including End User Computing, Meeting Room solution, Enterprise Content Management, and ITSM Tool Related Solutions in order to fulfill the fore mentioned business objectives.
	Project Deliverables	<ul style="list-style-type: none"> Projects include a variety of IT implementations including. <ul style="list-style-type: none"> End user computing software and OS upgrade and define the ongoing refreshment cycle and pattern Corporate VPN solution refresh Thin client solution refresh Meeting room solution refresh ITSM tools implementation. Define enterprise content management roadmap.
	Required Skills	<ul style="list-style-type: none"> Willing to learn, good presentation and communication skill in order to facilitate the rollout of the different solutions which has direct impact to end user experience and IT operations.
Learning	<ul style="list-style-type: none"> The intern can learn the most up-to-date technologies in the project. During implementation and rollout of the project, the intern can be practically participated in project planning and design, implementation, communication and support of various users and their requirements 	

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Project Code	IT_SAND_12	
Project Details	Internship Category	Sandwich
	Internship Period	June 2019 to May 2020
	Preferred Disciplines	First Preference: Computer Science/Information Technology/Information System Other Preference: Business/Finance
	Project Name	Cloud architecture transformation
	Business Objective(s)	<ul style="list-style-type: none"> Standardize the application architecture within CLP Group in Cloud Transform CLP into a digital utility of the future
	Project Descriptions	<ul style="list-style-type: none"> Facilitate the migration of the applications to Cloud. Support and participate in different strategic programs that transform CLP Power to be "the digital utility of the future". Program includes but not limited to cloud transformation program, DevOp
	Project Deliverables	<ul style="list-style-type: none"> Collect market intelligence and evaluate different cutting edge cloud technologies and products (including SaaS, PaaS and IaaS) for different business Groups. Provide Support to the cloud transformation program and DevOps adoption program. Provide Support to the next Generation of Enterprise Resource planning (ERP) strategy.
	Required Skills	<ul style="list-style-type: none"> Interested in learning new technologies in the Utility sector. Tolerant of ambiguity, willing to backtrack, seek multiple solutions. Independent and analytical thinking. Good communication and presentation skills.
	Learning	<ul style="list-style-type: none"> Hands-on experience on the latest cloud technologies and next generation ERP applications. Hands-on experience on the DevOps development pipelines.

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Project Code	IT_SAND_13	
Project Details	Internship Category	Sandwich
	Internship Period	June 2019 to May 2020
	Preferred Disciplines	First Preference: Computer Engineering, Computer Science, Information Engineering, Info. Technology Other Preference: Information System Management
	Project Name	Mobile Application Development
	Business Objective(s)	<ul style="list-style-type: none"> • Enhance our customer engagement with innovative mobile solutions • Research, design and implement innovative mobile solution to cope with very fast growing needs from customers • Digital Analytics on data from mobile application(s) to enhance user experience and/or create the new business opportunities
	Project Descriptions	<ul style="list-style-type: none"> • Mobile App project management • Mobile app enhancement recommendation and implementation • Customer support on mobile app issues.
	Project Deliverables	<ul style="list-style-type: none"> • Mobile solution recommendation and implementation • Mobile App design, development and deployment. • Project documentations. • Quality Mobile app support/enhancement • Open data in mobility.
	Required Skills	<ul style="list-style-type: none"> • Interested and passion in IT Technology • Proactive and analytical mind • Good presentation and communication skill • Quick Learner of new IT technologies • Native mobile application development and/or digital analytics skill would be an advantage.
	Learning	<ul style="list-style-type: none"> • Uplift project managements and soft skills. • Latest management methodology of mobile app projects • Hands-on experience on the latest technology.

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Project Code	IT_SAND_14	
Project Details	Internship Category	Sandwich
	Internship Period	May 2019 to April 2020
	Preferred Disciplines	First Preference: IT Other Preference:
	Project Name	Smart City Initiatives
	Business Objective(s)	<ul style="list-style-type: none"> As the company direction is moving toward smart city which includes the next generation renewables, distributed energy, energy storage, electric vehicle and energy management, the smart city project includes the IoT technology trial, big data with analytics are some of the key components to figure out the future road map for building sustainable smart city.
	Project Descriptions	<ul style="list-style-type: none"> Participate in an agile technology research project. Has exposure and involvement in a large project to deal with different level of stakeholders from junior frontline staff to senior management. Involve in different feasibility study and trial projects to identify the effectiveness against the commercial investment such as IoT Technology, Cloud Technology, Big Data Technology and Analytic methodology. Has chance to understand IT governance, budget planning, project management and product evaluation in a large corporation.
	Project Deliverables	<ul style="list-style-type: none"> Conduct Proof of Concept and feasibility study report Business Case compilation IT projects planning, budgeting, execution and management Campaign, Sharing and Presentation.
	Required Skills	<ul style="list-style-type: none"> Be agile and flexible to cope with dynamic business environment Good command of English, Mandarin and Cantonese Good communication & negotiation skill for engaging different levels of stakeholders Enthusiastic in new technology with open mindedness Common sense in commercial, social and engineering aspects.
Learning	<ul style="list-style-type: none"> New IT technology. Identifying the potential use cases in the commercial market using new IT technology Business sense. Stakeholder management skill. 	

Project Code	IT_SAND_15	
Project Details	Internship Category	Sandwich
	Internship Period	July 2019 to June 2020
	Preferred Disciplines	First Preference: Electronic Engineering Other Preference: Information Technology
	Project Name	Data analytic enhancement of Telecom management systems and network monitoring automation
	Business Objective(s)	<ul style="list-style-type: none"> Enhance the Telecom Work Management System (TWMS), Telecom Operation Management System (TOMS) and Inventory Management System to meet the business requirement on internal user-pay charging scheme and Service Level Agreement Enhance the automation on network alarm monitoring and performance analysis
Project Descriptions	<ul style="list-style-type: none"> Telecom Operation Management System (TOMS) is an integrated system for managing all corporate fixed and mobile assets inventory and charging back internal customers through billing scheme according to usage.. The system is also interfacing with other management systems for Telecom assets work order and fault ticketing management. However, the system is reaching its end of working life cycle due to expiry of hardware and software support.. IT department is sourcing the solution for total system replacement.. Data migration and full function test should be performed by candidate before new system launch. Another Telecom inventory management system is served for telecom provisioned services repository. It is migrating all servicing data from existing system using SQL to new system using Oracle database. Data analysis and verification between existing and new system should be carried out to ensure data integrity. This project is to: <ol style="list-style-type: none"> Enhance the interoperability of different existing Telecom's management systems, including work flow management, inventory management, fault management, billing system of telecom services; Data analysis of Telecom inventory management across database systems; Enhance the network efficiency in alarm monitoring and performance analysis 	

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	Project Deliverables	<ul style="list-style-type: none"> • Enhanced interoperability of different Telecom management systems. • Improved inventory data integrity. • Business analysis and system development on internal charging scheme. • Devise test case with IT department/software house for system integration and acceptance test. • Enhanced automation on alarm and performance monitoring and analysis.
	Required Skills	<ul style="list-style-type: none"> • Possess programming skills. C/C++, Java, SQL, Perl, XML, VB.NET and Linux shell script are preferable • Well-versed in MS Office especially MS Excel formula and VBA; • Knowledge and experience in SQL server, Oracle and MySQL database administration; • Computer and data networking knowledge; • Analytical mind and logical thinking;. • Self-motivated, passionate and willing to learn.
	Learning	<ul style="list-style-type: none"> • Technical knowledge and skills. • Personal development. • Career awareness

Project Code	IT_SAND_2	
Project Details	Internship Category	Sandwich
	Internship Period	June 2019 to May 2020
	Preferred Disciplines	First Preference: IT Other Preference:
	Project Name	Automation and Implementation of new improvement initiatives in IT Security Administration Processes
	Business Objective(s)	<ul style="list-style-type: none"> Strengthen access control in over CLP Security Administration process with continuous process improvement and automation of security administration systems Uplift customer satisfaction
	Project Descriptions	<ul style="list-style-type: none"> Involved in project engagement in the area of automation and formulation of security administration process not limited to but at least user account management incl. cloud and on-premises platforms, SAP and various application security improvement, implementation of password management tools and self-service initiatives..
	Project Deliverables	<ul style="list-style-type: none"> Participate in planning, exploration, evaluation and implementation in the projects in various security improvement including SAP areas, password management extension to service accounts, enterprise group management, job title synchronisation,. SAP License control improvement, Cloud computing and quality check process, new SLA launch and user account management solution to facilitate self-review, etc...
	Required Skills	
Learning		

Project Code	IT_SAND_3	
Project Details	Internship Category	Sandwich
	Internship Period	July 2019 to June 2020
	Preferred Disciplines	First Preference: Business/Information Technology Other Preference: Business Management
	Project Name	Enterprise Solutions
	Business Objective(s)	<ul style="list-style-type: none"> Fully participate in the project management and implementation of enterprise solution projects, that covers wide range of business exposures across different functional units.
	Project Descriptions	<ul style="list-style-type: none"> Bring the business into new era of operation by introducing latest state-of-art-technology (e.g. Cloud computing) to fit for their requirements and pain points. Work alongside with our IT professionals with +5 years of experience from numerous industries and disciplines such as finance industry, consulting firms, insurance companies, etc. in going through the implementation lifecycle of different IT projects on Enterprise Solution System, which are the core operation platform of the whole company. Provide professional IT consultancy service to business units and act as IT Ambassador on relationship management. Through a variety of on-the-job training and structured development opportunities, candidate will learn from some of the best technology strategy and practice in the industry, which is an excellent platform for candidate to begin a career in IT
Project Deliverables	<ul style="list-style-type: none"> To streamline business process with IT solutions to leverage workflow and document management platform. Enrich the existing solutions to facilitate the continuous improvement. Provide reliable and stable centralized document repository platform. The project covers wide range of business exposures across different business functions To streamline business process with IT solutions to leverage Enterprise Resource Planning platform. Enrich the existing solutions to facilitate the continuous improvement. Provide reliable and stable financial systems. The project covers wide range of business exposures across different business functions Management presentations on the status and achievement for the above enhancement initiatives 	

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		<ul style="list-style-type: none"> • Project development lifecycle documentations..
	Required Skills	<ul style="list-style-type: none"> • Microsoft Excel, Computer Science (preferred). • Proven problem solving skills • Innovative, self-motivated and willing to learn new technology • Strong communication and interpersonal skills.
	Learning	<ul style="list-style-type: none"> • In-depth business and technical knowledge that is necessary for an outstanding IT professional after graduation. • Tactics and skills in driving a business initiative into an IT project, such as Business requirements collection, business cases preparation and user engagement • Excellent exposure on IT solutions across different business units • Polished communications skills in liaising with business and IT stakeholders from all walks of life • Exposure to latest business intelligence technology • Work closely with professionals from external vendor to solve technical problems • Learn enterprise technologies such as FileNet, ASP .NET

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Project Code	IT_SAND_4	
Project Details	Internship Category	Sandwich
	Internship Period	June 2019 to May 2020
	Preferred Disciplines	First Preference: Computer Science, Computer Studies, Information System Other Preference: Business Technology
	Project Name	Security and Network
	Business Objective(s)	<ul style="list-style-type: none"> • Maintain & Strengthen Cyber Security with Network Access Control • Continue Cloud Adoption through reinforcing IP management • Strengthen Service Reliability by technology refreshment
	Project Descriptions	<ul style="list-style-type: none"> • Cyber security and information protection have been among the top most important and challenging objectives for all responsible organizations nowadays. CLP is serving the vast majority of the citizens in Hong Kong and, thus, unavoidably holding a significant pool of sensitive data. As a matter of fact, utilities around the world, being strategic infrastructures, are often the target of hacker. To protect the customer data and the business operation of CLP from cyber security threat, CLP has been investigating significantly and paying serious effort in applying various state of art technologies in different domains over the years. Not only as a continuous effort for security strengthening but also as a part of the CLP's cloud strategy, this programme is initiated. Through this programme, we will revisit the entire life cycle of the IP address management and also the authentication mechanism of devices connecting CLP network wirelessly or over the wire. We also refresh the service gateway used in protecting our services offered to the customer over the Internet. This programme will cover a wide spread of technologies and processes from the perspective of Cyber Security , IT network infrastructure design, IT operation and implication to end users.
Project Deliverables	<ul style="list-style-type: none"> • Projects include a variety of IT implementations including. • Network Access Control solution in the CLP IT Network and enhanced • IP Management • Unify WiFi Authentication Technology • Enable Location-Based Routing for Efficiency and Resilience • Restructure the Global Network Topology 	

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	Required Skills	<ul style="list-style-type: none">• Willing to learn, good presentation and communication skill in order to facilitate the rollout of the different security controls which the end-users may have concerns.
	Learning	<ul style="list-style-type: none">• The intern can learn the most up-to-date technologies in the project. During implementation and rollout of the project, the intern can be practically participated in project planning and design, implementation, communication and support of various users and their requirements

Project Code	IT_SAND_5	
Project Details	Internship Category	Sandwich
	Internship Period	June 2019 to May 2020
	Preferred Disciplines	First Preference: Computer Science / Technology related Other Preference: Information Systems
	Project Name	Cloud Security Strengthening
	Business Objective(s)	<ul style="list-style-type: none"> • At CLP, our business commitment is to ensure continuous supply of electricity to Hong Kong. Imagine if there is no electricity supply to MTR stations, Hong Kong International Airport or even to the streets and homes across Kowloon, New Territories and majority of outlying islands. • Data landscape and user behavior has been changed in cloud era. Unlike traditional data could always be protected in on-premise environment, data cloud be decentralized in various cloud service provider and the data data protection landscape is much more complex than anytime before. Data protection must be enhance to prevent data leakage in the cloud era.
Project Descriptions	<ul style="list-style-type: none"> • Cloud Technology presents a unique business opportunity to help CLP drive customer & employee engagement and propel our business in becoming the digital utility of the future. Hence, it is pivotal for us to ensure our cyber securities are able to protect CLP from the evolving threat landscape and attack vectors. Some of the key cloud-based cyber security measures we have in place includes: <ul style="list-style-type: none"> ○ Anti-malware software on server and endpoint ○ Endpoint detection and response ○ Cloud-supported firewall and network intrusion prevention ○ Advance Persistent Threat (APT) protection ○ DDoS attack protection ○ Data loss protection, etc. 	
Project Deliverables	<ul style="list-style-type: none"> • During your internship with CLP in the Cyber Security team • Cloud Security, you will have the opportunity to be inspired, explore and learn the following: <ul style="list-style-type: none"> • Cloud Security Protection Framework • principles of cloud security, risk management, security assessment methodologies, etc > Security Monitoring • data / system monitoring processes, data assessment and mitigation plans> Business Engagement 	

CIP 2019

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		<ul style="list-style-type: none">• engagement across business to garner support in addressing identified gaps> Project Management• activity planning and tracking, issue management, testing and cross team integration
	Required Skills	<ul style="list-style-type: none">• N/A
	Learning	<ul style="list-style-type: none">• If you are looking for an opportunity to challenge yourself to learn new and exciting world of Cyber Security; or if you are looking for a role that will enhance your professional capability AND your inter-personal skills; or if you want to proof yourself

Project Code	IT_SAND_6	
Project Details	Internship Category	Sandwich
	Internship Period	June 2019 to May 2020
	Preferred Disciplines	First Preference: Psychology / Behavioural Sciences Other Preference: Business / Marketing
	Project Name	Cyber Security Culture Embedment Program
	Business Objective(s)	<ul style="list-style-type: none"> • At CLP, our business commitment is to ensure continuous supply of electricity to Hong Kong. Apart from deploying the appropriate cyber security technologies, it is equally important to equip our people with the knowledge, skills and capabilities to be more cyber safe at work. • The culture and behavioural change initiatives will help CLP to: <ul style="list-style-type: none"> ○ Increase staff awareness on the associated cyber risks of their job / role in CLP (i.e. sharing of confidential information externally) ○ Minimize cyber security risks associated to human error (i.e. responding to phishing email, etc.)
Project Descriptions	<ul style="list-style-type: none"> • The Cyber Security Culture project focuses on delivering user-centric initiatives at the right time, in the right way, with the right contents and to the right people. Key initiatives managed under the Cyber Security Culture project includes: <ul style="list-style-type: none"> ○ Training ○ Mandatory cyber security annual refresher training, user guides, etc ○ Behavioural Embedment ○ Phishing simulation, Cyber Champions, etc ○ Gamification ○ Phish Master campaign, etc.. ○ Engagement ○ Global Cyber Security Awareness month, etc.. 	
Project Deliverables	<ul style="list-style-type: none"> • As an intern with Cyber Security team, your key roles and responsibilities includes: • Design and deliver relevant culture / behavioural initiatives to equip staff with the necessary knowledge and practical skills on how to be cyber safe at work and at home, including phishing simulation, phish master, cyber security awareness month campaign 	

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		<ul style="list-style-type: none"> • Support the design and deployment of Cyber Security's mandatory annual refresher course. • Design and develop CST related user engagement materials, including, team briefing slides, broadcasts, circular, etc. • Support CST team / project in change management activities (i.e. stakeholder engagement, impact assessment, training, communications, business alignment, etc.).
	<p>Required Skills</p>	<ul style="list-style-type: none"> • Technology related <ul style="list-style-type: none"> ○ Microsoft Office tools (i.e. word, powerpoint, excel, etc.) ○ Multimedia tools (i.e. adobe, video editing, etc.). • Non-technology related <ul style="list-style-type: none"> ○ An eye for aesthetics ○ Fast learner with 'Can-do' attitude ○ Proficient in both English and Chinese
	<p>Learning</p>	<ul style="list-style-type: none"> • If you are looking for an opportunity to challenge yourself, strengthen your professional capabilities or even to bring value to CLP by challenging the status quo, then this role is for you. During your internship with Cyber Security team, you will have the opportunity to learn / apply the following: • Culture / Behavioural transformation and / or Organisational Change. Management principles within business context / environment • Strategic thinking / business acumen to achieve intended outcomes • Cross-cultural collaboration and cross-team networking

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Project Code	IT_SAND_7	
Project Details	Internship Category	Sandwich
	Internship Period	June 2019 to May 2020
	Preferred Disciplines	First Preference: Cyber / Information Security Other Preference: Computer Science or Mechanical/Electrical Eng
	Project Name	Operational Technology Security
	Business Objective(s)	<ul style="list-style-type: none"> At CLP, our business commitment is to ensure continuous supply of electricity to public. As such, it is critical for us to protect our operational technology (OT) systems, which is control the operations for the generating, transmitting and distributing power.
	Project Descriptions	<ul style="list-style-type: none"> Key initiatives includes: <ul style="list-style-type: none"> Detection <ul style="list-style-type: none"> Improve detection capability for malicious activities in OT network Protection <ul style="list-style-type: none"> Enhance our protection against cyber attack on OT network Response <ul style="list-style-type: none"> Enable our staff to respond to cyber attack using a systematic approach
	Project Deliverables	<ul style="list-style-type: none"> Detection <ul style="list-style-type: none"> Build an environment for testing our detection tools, that have been deployed in OT network Protection <ul style="list-style-type: none"> Explore technologies that can enforce unidirectional traffic, and in-dept malware inspection of removable media. Response <ul style="list-style-type: none"> Establish incident handling process for cyber attack
	Required Skills	<ul style="list-style-type: none"> Technology related <ul style="list-style-type: none"> Microsoft Office tools (i.e. word, powerpoint, excel, etc.) Basic understanding of IT concepts (e.g. operating system, networking). Non-technology related <ul style="list-style-type: none"> Willing to take responsibility Fast learner with 'Can-do' attitude Proficient in both English and Chinese
Learning	<ul style="list-style-type: none"> If you are looking for an opportunity to start your career in 	

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		<p>cyber security, then this role is for you. During your internship with Cyber Security team, you will have the opportunity to learn / apply the following</p> <ul style="list-style-type: none">○ State-of-the-art cyber security technology○ Cross-country collaboration and cross-team networking○ New focus of cyber security industry - OT security.
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Project Code	IT_SAND_8	
Project Details	Internship Category	Sandwich
	Internship Period	June 2019 to May 2020
	Preferred Disciplines	First Preference: Business / Computer Science / Information Technology / Information System Other Preference: Electrical / Electronic Engineering
	Project Name	Information Technology Application Standardization & Cloud Solutions Adoption
	Business Objective(s)	<ul style="list-style-type: none"> • Operation excellence to ensure service level of Group IT applications can be maintained and integrate successfully with the mainstream common infrastructure.
	Project Descriptions	<ul style="list-style-type: none"> • Be the key focal point for Application team (COEs) with other IT teams, Business partners and vendors to:. • Facilitate compatibility validation/testing and coordination. Cloud connectivity enhancement, Windows 10 and Office 365 Client upgrade, Secure Network Access, Remote Desktop Service • Facilitate application testing and coordination, support to IT Service Ambassador on service delivery • IT Asset Management project.
	Project Deliverables	<ul style="list-style-type: none"> • Testing strategy and testing plan • Issue log • Status reports
	Required Skills	<ul style="list-style-type: none"> • IT business analysis skills • Good communication and presentation skill in English, Mandarin and Chinese • Articulate, attentive to details • Well organized and strong coordination skill on vendor management and project management • Interested in learning new technologies.
	Learning	<ul style="list-style-type: none"> • The intern will gain hands-on experience on: • Business process knowledge in the utility industry and her majority owned partner companies • Learn the latest technologies and applications adoption • Learn real business flow and project management skills working with both internal and external parties following the project plan within the available time and resources. • System testing and troubleshooting methodology

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Project Code	IT_SAND_9	
Project Details	Internship Category	Sandwich
	Internship Period	June 2019 to May 2020
	Preferred Disciplines	First Preference: Computer Science, Computer Studies, Information System Other Preference: Business Technology
	Project Name	Reliability strengthening and monitoring
	Business Objective(s)	<ul style="list-style-type: none"> • Strengthen Active Directory resilience and robustness • Strengthen system and network monitoring, security vulnerability mitigation process • Automate host compliance checklist
	Project Descriptions	<ul style="list-style-type: none"> • The project aims to improve system reliability by implementing a variety of tools for system protection and system monitoring. On process improvement side, the existing security hardening checklist for server installation will be automated, and we will review and enhance the existing process for managing security vulnerability.
	Project Deliverables	<ul style="list-style-type: none"> • Implement Active Directory recovery and life-cycle management tool • Refresh of system monitoring platform. • Enhanced process for security vulnerability mitigation. • Automated checklist for new server installation and hardening
	Required Skills	<ul style="list-style-type: none"> • Willing to learn, have interest in IT system protection, system monitoring and IT security. Good presentation and communication skill.
Learning	<ul style="list-style-type: none"> • The intern can learn the most up-to-date technologies use in the project. During implementation and rollout of the project, the intern can go through different stages in the project lifecycle, and have opportunities to practice communicating ideas through 	

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Project Code	IT_SUM_1	
Project Details	Internship Category	Summer
	Internship Period	June 2019 to August 2019
	Preferred Disciplines	First Preference: Information Technology or Computer Science Other Preference: Data Analysis and Programming
	Project Name	Data Analytics for Internal Audit Phase II
	Business Objective(s)	<ul style="list-style-type: none"> • Enhance the data analytic capability of auditors during audit reviews • Enhance the user-friendliness of the GIA Computer Assisted Audit Tools (CAAT) • Enhance the on-going control monitoring capability of line users through data analytics
	Project Descriptions	<ul style="list-style-type: none"> • Enhance the look and feel of the front end menu of GIA data analytic portal • Provide assistance to Group Internal Audit to enhance its existing CAAT library. • Help to develop additional user friendly front end menu for the data analytic tools and new audit data analysis tests to facilitate auditors in performing audits, and then pass certain portion of the toolkit to line business users for. on-going control monitoring
	Project Deliverables	<ul style="list-style-type: none"> • An enhance front end portal for GIA CAAT. • New audit tests utilizing existing business data in the financial and operational areas.
	Required Skills	<ul style="list-style-type: none"> • Data analytic skills. • Good knowledge in Microsoft Access, Excel and Power BI.
Learning	<ul style="list-style-type: none"> • New data analysis tools and techniques. 	

Project Code	IT_SUM_2	
Project Details	Internship Category	Summer
	Internship Period	June 2019 to August 2019
	Preferred Disciplines	First Preference: Information Technology (IT) Other Preference: Electrical Engineering (E1)
	Project Name	Developing a Predictive Model for Vegetation Management for Transmission Overhead Line Network
	Business Objective(s)	<ul style="list-style-type: none"> To optimize manpower resources to meet the network maintenance requirements and maintain the safety clearance of transmission overhead line (OHL) circuits by prioritizing the vegetation management works To develop a predictive model based on big data concept for identifying potential hazards caused by vegetation growth to the transmission network and for timely vegetation management works
Project Descriptions	<ul style="list-style-type: none"> The proposed project addresses the vegetation hazards that is threatening the transmission OHL network.. As many transmission OHL towers and poles are located in rural area, the transmission OHL circuit is prone to external environmental damage. One of the hazards that caused numerous faults on the transmission circuit is vegetation interference. In order to reduce the fault rate, CLP has established an integrated vegetation management (IVM) team to clear the vegetation on demand and maintain the safety clearance of OHL circuits. Conventionally, vegetation hazards are identified through routine patrol by overhead linesmen. A request will then be made to IVM team for vegetation clearing. However, routine patrol on OHL is done only once every six months and the process requires a lot of manpower and time resources. Moreover, this practice could not 100% prevent vegetation faults since some vegetation grows so quick that it threatens the circuit before the next patrol. The proposed project aims to develop a predictive model based on big data concept to identify these black spots where vegetation growth is critical and provides effective prediction on the locations that are at risk. Eventually, the model can predict possible locations at risk and make a request to IVM team before the next OHL patrol. This could save a lot of manpower and time resources, and at the same time enhance supply 	

Project Outline ~ Information Technology

		reliability and power quality.
	Project Deliverables	<ul style="list-style-type: none"> • A predictive model for identifying black spots where vegetation growth is critical and provides effective prediction on the locations that are at risk. The model can assist prioritization and coordination of vegetation management works.
	Required Skills	<ul style="list-style-type: none"> • Understanding on the key power systems elements <ul style="list-style-type: none"> ○ Proficiency in using Excel and Macro for automation ○ Competent in Information Technology ○ Exposure in predictive modelling concepts, big data analytics and machine learning will be preferable
	Learning	<ul style="list-style-type: none"> • Through the development of the predictive model, the student would be able to: <ul style="list-style-type: none"> ○ understand the nature of operation and maintenance (O&M) works of transmission network ○ appreciate the challenges of O&M works of transmission network in practice

Project Code	IT_SUM_3	
Project Details	Internship Category	Summer
	Internship Period	June 2019 to August 2019
	Preferred Disciplines	First Preference: IT / Computer Science Other Preference: Electrical Engineering
	Project Name	Project and Site Management System with Mobile Application
	Business Objective(s)	<ul style="list-style-type: none"> • Increase productivity of field workforce with mobile application • Enhance cross team collaboration for more efficient project delivery
	Project Descriptions	<ul style="list-style-type: none"> • The project aims to aid site engineers with a tool using appropriate mobile technology to plan and execute their work more efficiently. • A project team was formed and had conducted preliminary study. A system named "Site 360" was recommended with preliminary functional requirements and design under discussion • Detailed assessment and analysis is expected to start in around June 2019
	Project Deliverables	<ul style="list-style-type: none"> • The intern hired will be taking up an active role in: • Formulation of detailed system requirements. • Managing the system development. • Testing processes of the new system
	Required Skills	<ul style="list-style-type: none"> • Knowledge in IT system design and project development process • Good communication and interpersonal skill
Learning	<ul style="list-style-type: none"> • Gain experience about the process to develop an IT platform that integrate information from various systems • Learn to manage expectations of various stakeholders in the organization towards digital transformation of work processes 	