SCHOOL OF COMPUTING

Students from the following diploma courses are available for Internship:

- Diploma in Applied AI & Analytics (DAAA)
- Diploma in Information Technology (DIT)
- Diploma in Infocomm Security Management (DISM)

DAAA STUDENTS

The Diploma in Applied AI and Analytics (DAAA) course equips students with the knowledge and skills to perform tasks in the area of data engineering, data analytics, machine learning, deep learning and natural language processing. The students are also equipped with programming, web and systems development, database management and DevOps and RPA skills. This course aims to provide a broad spectrum in both AI and Analytics, and Software Development.

Students from the DAAA course are trained in the following types of skills/knowledge:

- Data Engineering skill in data preparation and manipulation as well as feature engineering for machine learning and deep learning.
- Data Analysis on both structured and unstructured data.
- Develop AI based applications which include classical machine learning, deep learning, natural language processing, transfer learning, computer vision and GAN;
- Develop Web applications using Front End Technologies such as HTML5, CSS3, ES6 and Jinja as well as Back End Technologies such as NodeJS and Flask.
- Perform automation task in DevOps and RPA
- Understand computer law and Ethics.

In general, the DAAA course prepares students to take on jobs such as associate data engineers, associate machine learning specialists, associate data analyst, associate DevOps engineer as well as associate software engineers.

Examples of Workplace Projects for Year Long Internship for DAAA:

DAAA Projects (Derived from INTS DAAA full syllabus)

Design and develop project in one of the following domains:

a) AI Project: Apply a range of model based and algorithmic machine learning methods. Conduct models assessment and recommend suitable models to deploy or recommend areas for improvement and etc.

b) Analytics project: Examine data sets to gather useful insights. Design a set of suitable dashboards for data visualisation. Recommend areas for improvements. Automate the collection of data or/and implement a web-site based on user requirements.

c) Software Development project: gather project specifications and requirements, write programs and integrate all the different modules. Create test data to test the entire application. Implement or deploy the project based on user's requirements.

DIT STUDENTS

Diploma in Information Technology (DIT) equips students with the core knowledge and competency in developing IT applications, problem solving and communication skills. Students are trained with the skill-sets to lead, design and develop a wide range of IT applications, which include distributed application, web application, and mobile applications. In addition, the curriculum includes necessary business knowledge, and teamwork & communication skills. Therefore, students are well equipped with the knowledge and skills to integrate information technology solutions and business process to meet the information needs of business and enterprise.

Examples of Workplace Projects for Year Long Internship for DIT:

DIT Project (Derived from INTS Technical Competency Checklist)

Project/System Analysis Design

- Participate and contribute to the review, analysis and verification of business and software requirements
- Prepare technical documentation and reports on requirements and analysis

Technical Development

- Create and maintain application accordance to technical detailed design
- Create and maintain game/simulation components in accordance to technical detailed design

Testing and Quality Control

- Prepare technical documentation and reports on application
- Develop test plan and perform testing to determine usability of application/game

DISM STUDENTS

The Diploma in Infocomm Security Management (DISM) course equips students with the knowledge and skills to prevent, detect, respond and manage security threats and also trains them in programming, web and systems development, and database management. This holistic and comprehensive course provides the breadth and depth of an education necessary for future infocomm security professionals.

Students from the DISM course are trained in the following types of skills/knowledge:

- Analyse security threats in areas such as application, network, and Internet security;
- Propose counter measures against security threats;
- Perform penetration tests;
- Design and secure databases;
- Perform Microsoft and Linux server administration and hardening;
- Develop applications using JavaScript and Python;
- Develop Web applications using JavaScript, Web Services and web-related technologies such as HTML/DHTML, XML and JavaScript; and
- Understand computer law and investigation.

In general, the DISM course prepares students to take on job roles such as Associate Security Analyst, Cyber Risk Analyst, Forensic Investigator, Incident Investigator, IT Auditor, Security Engineer,

Security Operations Analyst, Software Engineer, Systems Support Engineer, Vulnerability Assessment and Penetration Testing Analyst as well as Secure Web Developer & Analyst.

Note:

Allowance for Students

- A minimum monthly allowance of **$800** should be provided to each student during his or her Internship with you.
- The allowance paid to students under this programme are exempted from CentralProvident Fund (CPF) Board contributions and Skills Development Fund Levy.
- Students will be allocated based on the relevance of the proposed project to their course of study with the relevant skillsets. Priority for Internship placements will be given to companies that may offer employment to our students after the Internship.