ASMPT Internship Program (2022-2023)

The internship program offers you hands-on experience beyond the classroom with one of the leading semiconductor companies in the world. By participating in this program, you can not only explore exciting opportunities and enjoy social life in a dynamic business environment, but also gain valuable work experiences that differentiate yourself from your peers.

You will be assigned to assist our Technology Development professionals in the following exciting enabling technology projects. Apart from that, you will have chances to broaden your horizon by visiting our Innovation Centre and/or manufacturing plant and designing your own innovative project. We will also support you to develop new skills by providing training courses and completing your internship project. Supervisors will be here to support and guide you.

We believe this program can enable you to better prepare your future career development and understand your own interest.

Internship Period: June 2022 – May 2023 **(one year's full-time employment)**
Upon completion of one year's contract, the intern will receive a contract bonus equivalent to one month's basic salary.

Interested parties, please submit your application with cover letter, resume, certificate and transcripts to https://asmhk.recruitee.com/o/interns-2022-2023-20-openings

You are required to state your top 3 interests during application.
- Diagnostic & Testing / Digital Electronic / System Engineering / Motion Platform
- Dispensing System / Mechanical Design / Motion / Sensor / CE Motor
- Computer Vision / Optics
- Electronic Engineering / Control Engineering / Embedded Application Software
- Software Engineering

Your preference will be taken into consideration; however, final assignments will be based on your qualification, competence and vacancy.

1. Diagnostic & Testing / Digital Electronic / System Engineering / Motion Platform

Responsibilities:

- Participate in test methodology development, test framework development and support; execute test software development cycle to create scalable and optimized test software; provide expertise in managing, planning, constructing and executing system testing; demonstrate the ability to cope with growing complexity and creativity in design by thinking outside the box to determine the best way to test the system;
- Develop and support digital controller board (including board design, FPGA firmware development, etc), conduct digital controller board test flow and assist in test program development; and
- Participate in software development on Motion control platform (embedded system).

Requirements:

- Year 2-3 undergraduates from Mechanical Engineering / Mechatronics / Automation/ Electronics / Electrical Engineering / EEE / Manufacturing Engineering / Industrial Engineering / Software Engineering / Computer Engineering / Computer Science / Information Engineering / Information Technology / Information Systems or relevant disciplines; and
- For Diagnostic & Testing team, it would be an advantage if the candidate possesses knowledge of C# programming and/or Labview in Microsoft Windows platform.
- For System Engineering and Motion Platform team, the candidate should possess good knowledge of C++ and C# programming in Microsoft Windows platform; knowledge of database technologies (e.g. MSSQL, MySQL) and web programming (e.g. PHP and JavaScript); knowledge in Python will be an advantage.

2. Dispensing System / Mechanical Design / Motion / Sensor / CE Motor

Responsibilities:

- Assist in mechanical development, test Jig design preparation, prototype measurement and qualification, data collection as well as analysis;
- Participate in electromagnetic sensor development, MCU programming, electronics circuit development, prototype measurement and qualification, data collection and analysis;
- Conduct motion system construction, tuning and evaluation, electronics circuit development, prototype measurement and qualification as well as web page development and maintenance;
- Support CE motor projects and mechanical test jig development;
- Support optics project and mechanical test jig development (need to go to China Plant once per week); and
- Support motor project support, mechanical test jig development and CE motor project support (need to go to China Plant once per week).

Requirements:

- Year 2-3 undergraduates from Mechanical Engineering / Mechatronics / Automation / Electronics / Electrical Engineering / Computer Engineering / Applied Physics or relevant disciplines.

3. Computer Vision Algorithms & Application / Vision Platform R&D

Responsibilities:

- Develop image processing algorithms and 3D computer vision system;
- Train deep learning models and design convolution neural networks;
- Gather user requirements to define system functionality and write well-designed, testable and efficient code;
- Evaluate advanced image processing platforms, imaging and lighting effects;
- Build a Continuous Integration System, develop graphical data analysis tools as well as general-purpose software modules;
- Study diagnostic optical performance, simulate imaging and lighting effects and design precision optics systems;
- Develop high resolution cameras and its peripherals and diagnostic hardware systems; and
- Assist in circuit design, MCU and FPGA programming, new product testing and debugging.

Requirements:

- Year 2-3 undergraduates from Automation / Information Technology / Information Systems / Computer Engineering / Computer Science / Electronics / Software Engineering / Physics / Mathematics or relevant Engineering disciplines; and

- It would be an advantage if the candidate possesses good knowledge of C/C++ programming or familiar with electronic design, strong in analytical and trouble-shooting skills in hardware and firmware issues.

4. Electronic Engineering / Control Engineering / Embedded Application Software

Responsibilities:

- Assist the development of motion / electronics system (power drive and power supplies) involving testing, setup, repairing and measurement; with occasional involvement in firmware and test program development;
- Support control system tool development and maintenance, tuning control parameters, trouble-shooting and problem solving for motion system; and
- Design and deploy software and firmware for real time embedded control applications; provide technical expertise and solution to semiconductor equipment products and field for deployment of real time embedded controllers developed.

Requirements:

- Year 2-3 undergraduates from Mechanical Engineering / Electronic Engineering / Computer Engineering or relevant disciplines; and
- For Electronic Engineering team, it would be an advantage if the candidate possesses project experience on MCU / FPGA / SoC; project experience on analog or power electronic circuit; knowledge on motor control, analog electronic and switch mode power supplies.
- For Control Engineering team, the candidate should possess knowledge in basic control theory (e.g. PID control, frequency domain system identification, etc); knowledge in Matlab and Simulink; knowledge in machine learning; knowledge in Python coding will be an advantage.
- For Embedded Application Software team, the candidate is good to have knowledge in micro-controller, C/C++/C# programming language and control strategy; knowledge in multi-threading and object-oriented programming is an advantage.

5. Software Engineering

Responsibilities:

- Support model-based software development;
- Assist in software development life-cycle for semiconductor equipment, including design and development of software, implementation of User Interface and integration of software; and
- Support and maintain existing software.

Requirements:

- Year 2-3 undergraduates from Computer Science / Engineering / Mathematics / Physics or relevant disciplines;
- Knowledge in C and application programming is required;
- Knowledge on C++ programming in Windows or Linux is required; and
- Knowledge on C#, python or additional script language is a plus.

Contact

Please feel free to email us at careers@asmhk.recruitee.com if you have any queries.

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