**Sample Proposal: GUI Test Automation by Image Recognition**



**Sponsor:**

* Company Sponsor: Fleming Feng (Chief Scientist) & Evelyn Yan, Intel
* Company Mentor: Guobin Chen, Intel

**Background:**

Collaboration between UM-SJTU Joint Institute and Intel Apac R&D center.

* OTC proactively joined this program. OTC will assign dedicate engineer as a mentor.
* Students need to discussion with mentor on the tasks and deliverables and need to work as planning until deliver the project deliverables.

Intel Open Source Technology Center (OTC)

* Under Intel Software & Service Group, System Software Division.
* A dedicated group at Intel working on open source software development.
* Famous for its contribution to Linux Kernel, Xen/KVM, as well as open source projects OTC initiated: Tizen, Yocto, etc.

GUI test is often done with manual check, as it is hard to simulate effective input and judge output at GUI-level. However, Image Recognition can provide us some opportunity to interact with GUI like human.

**Purpose:**

This project aims to automate GUI test by adopting some algorithms in Image Recognition.

**Expected Deliverables**:

* Leverage open source image recognition solution and be able to tailor it.
* Implement the tools to generate/access target image patterns and to detect target with specified patterns.
* Create framework based on the toolkits to automate GUI test.

**Team:** Students with the following skills are encouraged to apply:

* Basic understanding of image/pattern recognition
* Familiar with Linux developing environment
* Master C/C++ programming.

**Benefit to Students**

* Arm with a great company brand, “Intel”, for advancing your career.
* Learn real project development before really go outside of university and entering your career path.
* Get In-depth knowledge on Image Recognition, test, automation, etc.
* Learn Intel culture, get future Intel job opportunity if prove to be outstanding in this project.