Edbert Candra

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EDUCATION

UBC
BSc in Computer Science
2017 | Vancouver, BC

RICHMOND SECONDARY
Richmond, B.C.

LINKS

Github: **freecaykes**
LinkedIn: **edbertcandra**

COURSEWORK

UNDERGRADUATE
Numerical Approximation
Machine Learning *
Artificial Intelligence
Distributed Systems *
(* Limited proficiency)

SKILLS

LANGUAGE
Familiar (left to right):
Python • Java • C • C++
Over 500 lines:
Matlab • Bash
Shell • Haskell • Prolog
Objective-C

SCIENTIFIC COMPUTATION
Numpy • Matlab

DATABASE
MySQL • Oracle

AWARDS

2013, 2015 NSERC Research Grant

SOCIETIES

2015	UBC Snowbots	Networking
2012	UBC Solar	Navigation

EXPERIENCE

NZ TECHNOLOGIES INC. | Embedded Systems Engineer
Jan 2016 – May 2016 | Vancouver, BC

- Continued development on TIPSO from previous research term:
  - Added functionalities to allow a wider range of TIPSO-user interactions
  - Developed a template-matching suite using OpenCV for a more fluid interaction between TIPSO and the host computer
- Designed and developed a Desktop Application UI with QT UI framework for a touchscreen interface that overlayed the software suite of TIPSO
- Created a graphics framework with OpenGL for a novel surface analysis algorithm

COUNTERPATH | Software Engineer (Co-Op)
May 2014 - Dec 2014 | Vancouver, BC

- Sole developer maintaining the Rogers One Number Mac (Desktop)/iOS applications, managing both feature devevlopment and bug fixes.
- Supplied troubleshooting and network analysis using Wireshark alongside native Mac and iOS developer tools on Xcode to provide solutions for issues relating to the communication servers.
- Took ownership of developing prototype sample clients on the Mac/iOS platform to demonstrate multiple features of a novel SIP-based commmunication SDK.
  - Used Cocoa's UI Framework(.storyboards) following a Model View Controller architectural pattern
  - Followed up with debugging underlying back-end errors inside the Objective-C SDK wrapper

GLOBAL RELAY | Test Automation Framework Developer (Co-op)
May 2013 – Aug 2013 | Vancouver, BC

- Expanded the testing framework for Global Relay's email web client to integrate automated test scripts with Selenium.
- Improved robustness of tests enhancing the readability of scripts and simplifying test script debugging.
- Eliminated inconsistencies during nightly build test runs on virtual machines by:
  - Applying poll procedures on threads to allow the WebDriver to recognize JavaScript elements first before throwing null exception errors
  - Limiting test retries which allowed test errors to fail properly without causing exceptions that will hinder or block parallel tests

IBM CANADA | Quality Test Engineer (Co-op)
Jan 2013 – May 2013 | Victoria, BC

- Conducted manual tests and bug verification on IBM's Form Building Web Application on multiple operating systems, internet browsers, and mobile platforms
  - Conducted Feature Acceptance Testing on: UI web elements, embedded JavaScript feature, HTML encoding, backend result verification
- Designed Manual Test Documents for regression testing which included, writing test procedures and recording its corresponding expected results; providing initial configuration and logging files

RESEARCH

NZ TECHNOLOGIES INC. | Embedded Systems Research Student
Jun 2015 – Sep 2015 | Vancouver, BC

- Remodelled the network communication for TIPSO™ (a novel medical device for surgeons to interact with medical images wirelessly from a projected menu) to use Linux network sockets. This allowed for real-time feedback between user and host computer as opposed to the orginal remote desktop communication.
  - Developed the network suite based on a client-server model for interactions between TIPSO and host computer
  - Implemented a custom protocol for the host computer to interpret recognized hand gestures
- Extended the Kalman Filter based algorithm for hand-tracking to improve the accuracy of gesture recognition for a wider range of hand sizes and motion.