

NEHAL KANETKAR

SYSTEMS DESIGN ENGINEERING, UNIVERSITY OF WATERLOO

WEB nkanetka.github.io | **GITHUB** <https://github.com/nkanetka> | **EMAIL** nkanetka@uwaterloo.ca

SKILLS

LANGUAGES: SWIFT, OBJECTIVE-C, C++, VBA, PHP, JAVASCRIPT, C#, JAVA (ANDROID)

TOOLS: PHOTOSHOP, XCODE, GIT, SVN, GMAX (FLIGHT SIMULATOR)

INTERESTS: PHOTOGRAPHY, ASTRONOMY, FLYING, SWIMMING, CURLING, PIANO

EXPERIENCE

R&D SOFTWARE DEVELOPER | THE WEATHER NETWORK

MAY 2015 – PRESENT

Worked on mobile and web projects including: Apple Watch, QR code generator, Android TV, Windows Phone API and a radar implementation using vectors. Highlights include: developing the first working and accurate implementation of a vector radar for mobile devices. Learned: development for mobile and web platforms, graphics libraries for IOS.

TECHNICAL ANALYST | CIBC EQUITY MARKETS

SEPTEMBER 2014 – DECEMBER 2014

Developed macros in VBA to automate daily reporting tasks saving 20 minutes per day. Implemented a cost analysis of unused client connections to CIBC's trading systems resulting in savings of \$2,000 annually.

RESEARCH ASSISTANT | UNIVERSITY OF WATERLOO

AUGUST 2014 – APRIL 2015

Assisted MSc student Samuel Lien and Dr. Jonathan Histon with research on Data Asynchrony in aviation. Responsibilities included: developing realistic pilot and ATC interfaces, contacting pilots and ATC for the study and testing the pilot and ATC simulator interfaces.

PROJECTS

HARDWARE DESIGN | STAR TRACKING MOUNT

JUNE 2015 – PRESENT

Developed and implemented a tracking mount to reduce star trails when taking exposures of stars. Used an Arduino, stepper motor and mechanical components to make mount move at the same angular velocity as the earth's rotation. Next step: Bluetooth functionality.

APPLICATION DEVELOPER | FLIGHT TIME IOS

MAY 2015 – PRESENT

Designed and developed an application to log airtime and flight times using the CoreLocation library in IOS. Implemented and tested an algorithm to accurately log airtime without adversely affecting battery life. Next steps: Improve UI, fine-tune algorithm.

HARDWARE DESIGN | ARDUINO COMBINATION LOCK

JUNE 2014 – AUGUST 2014

Developed and implemented a combinational rhythm lock which reacted to users inputs. Coded the lock using the Arduino IDE (C/C++) and implemented it using related hardware.

APPLICATION DEVELOPER | FLIGHT PLANNING PROGRAM

JULY 2011 – PRESENT

Implemented a user interface VBA program to output highly realistic flight plans for flight simulation. Used aircraft manuals to get realistic fuel burns and optimum altitudes.

PRIVATE PILOT | WATERLOO WELLINGTON FLIGHT CENTRE

JUNE 2013 – PRESENT

Night rated with approximately 120 hours of flying time.

EDUCATION

Candidate for BAsC, Systems Design Engineering, University of Waterloo
Expected completion: Spring 2018