

# NEHAL KANETKAR

SYSTEMS DESIGN ENGINEERING, UNIVERSITY OF WATERLOO

**WEB** [nkanetka.github.io](https://nkanetka.github.io) | **GITHUB** <https://github.com/nkanetka> | **EMAIL** [nkanetka@uwaterloo.ca](mailto:nkanetka@uwaterloo.ca)

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## 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

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## EXPERIENCE

**R&D SOFTWARE DEVELOPER** | THE WEATHER NETWORK **MAY 2015 – SEPTEMBER 2015**

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.

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## 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.

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## EDUCATION

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