

# Nehal Kanetkar

*Pilot. Developer. Aspiring Engineer*

519 760 3785 · nkanetka@uwaterloo.ca · github.com/nkanetka · nkanetka.github.io

## Skills

- Highly experienced front-end developer with 2 years production experience developing web and iOS apps
- Clear and effective communicator through experience flying planes and working in team environments
- Excellent multi-domain problem solver from multiple design projects and personal projects

## Languages & Tools

Swift, Objective-C, Objective-C++, Python, MATLAB, JavaScript, HTML, CSS, C++

Git, Charles, Sketch, Xcode, Photoshop, CircleCI

OSX, Windows

## Education

### BASc: Systems Design Engineering

*University Of Waterloo*  
Sep 2013 – Apr 2018

Relevant Courses: Software Design, Data Structures & Algorithms, User Centred Design Methods, Human Factors, Digital Circuits, Analog Circuits

### Pilot

*Waterloo Wellington Flight School*  
Jun 2013 – Present

Licensed Canadian Private Pilot with a night rating and 135 hours of flying time. Working towards a Commercial Pilot License.

## Experience

### iOS Developer & Co-Founder

*Touchdown · May 2015 – Present · Waterloo, ON*

- Developed an end-to-end solution for pilots to log their airtime and flight times seamlessly using mobile devices
- Created and extensively tested the algorithm to log airtime accurately using unit tests, flight simulator and in plane tests

### iOS Developer

*Compass Real Estate · May 2017 – Aug 2017 · New York, NY*

- Designed and implemented a novel solution to download and inform users of nearby listings via geo-fenced notifications, without requiring additional user permissions
- Rewrote all unit tests in the app eliminating 2 dependencies on the codebase
- Re-architected the Compass Markets app, leveraging MVVM in Swift, increasing testability of the app by 75%

### Lead iOS Developer

*Nanoleaf · Aug 2016 – Mar 2017 · Toronto, ON*

- Implemented an in app troubleshooting flow reducing the number of support calls by 20%
- Established the use of feature documents to clearly communicate needs between business, design and engineering teams
- Designed and developed features using Sketch, Objective-C and Swift

### iOS & Rapid Prototype Developer

*Canon Innovation Labs · Jan 2016 – Apr 2016 · Waterloo, ON*

- Led all developers following a Git flow structure for branching and releases to ensure bugs were isolated
- Built prototypes to help improve the post capture experience with different types of media
- Prototyped with a variety of technologies including OpenCV (Objective-C++), D3.js and Python
- Worked in 2 week sprints to make prototypes within the photography space

## Projects

### Star Tracking Mount

- Designed and implemented a tracking mount to reduce star trails when taking long exposures of the night sky
- Used an Arduino and stepper motor to rotate the mount at the same angular velocity as the earth

### Curling Broom Handle Optimization

- Developed an optimization algorithm based on a Box-Benken optimization to reduce the amount of strain in the wrist when sweeping a curling rock
- Used the algorithm to design a prototype curling broom handle