# TOMMY DENG

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# **EDUCATION**

**University of Ottawa BASc Software Engineering** 2017 - 2022 · GPA: 3.9/4.0

# **SKILLS**

#### **LANGUAGES**

Python Java **JavaScript TypeScript** HTML **CSS** 

#### **TECHNOLOGIES**

React React Native Vue NodeJS MongoDB **Express** Selenium **Jest** 

**GCP Firebase AWS** Heroku

Git **SVN** Jira Docker Linux Bash

**Eclipse** Visual Studio

# **DEVELOPMENT**

Agile CL UML TDD

# **HACKATHONS**

2019 Hack the North 2019 Hack The 6ix 2019 uOttaHack 2019 ConUHacks 2018 Hack Western 2018 Hack the North

2018 **CU Hacks** 

2018 uOttaHack

# **INTERESTS**

**Project Management** Machine Learning • Data Science Web Development • Design

# WORK EXPERIENCE

# **Kinaxis** Analytics Software Developer

- Simplified and reduced a React / TypeScript module's lines of code by ~50%, while adding functionality, by redesigning algorithm to use stack and hash-map structure
- Implemented dynamic color algorithm based on W3C web standards equations with D3 and Cytoscape to provide optimal visibility of network visualization nodes
- Followed test-driven development using Selenium and Jest to produce effective front-end visualization features, UI enhancements, and bug fixes
- Collaborated with agile team members and other stakeholders to conceptualize and prototype next generation product capabilities

#### Ross Video Automation Software Developer

Jan - Apr 2019

Sep - Dec 2019

- Streamlined testing of camera control system with Robot Framework to increase **Jenkins** test suite execution speed by >200% and enable headless operation
- Added functionalities to internally developed automation libraries using Java to allow testing of previously blocked video control and monitoring features
- Provided training on automation framework usage for Swing / Eclipse applications
- Created automated Python and Bash environment setup and utility scripts

# Global Affairs Canada Software QA Analyst

May - Aug 2018

- Interpreted system and navigation diagrams for the Export Import Control System
- Achieved 100% coverage for each testing cycle with use of Microsoft Test Manager
- Trained consultants on toolset usage, testing workflow, and system requirements

# ADDITIONAL EXPERIENCE

# **Inventure Accelerator** Front-end Developer

Jan 2018 - Present

- Contributed to raising over \$4000, receiving article mentions, and gathering 80 attendees for an event by developing startup website using **Vue** and **Netlify**
- Collaborated with Google and Invest Ottawa to create event sponsor video

#### **Ottabotics** Robotics Competition Team

Sep 2017 - Dec 2018

- Automated Blender with Python to render photorealistic videos of racing tracks for use as training data and driving simulation for autonomous vehicle
- Created OpenCV system to detect traffic lights and undistort wide-angle images
- Developed compression pipeline to reduce live video streaming bandwidth by 20%

#### **PROJECTS**

#### **Bark Buddies**

May - Jul 2019

- Collaborated with team to build mobile app that connects dogs to other dogs using React Native to achieve a high-fidelity prototype with effective UI/UX design
- Implemented field response, Tinder-style swiping, and persistent messaging system

#### Life's Charge Visualization

Aug 2017

- Gathered over 100,000 views in a popular data visualization group through generating animated graphic representing a typical lifespan using CImg in C++
- Ported concept to dynamic website that generates customized images using PixiJS

# **Potato Simulator**

Jun 2016

 Won award out of >50 people for building an interactive physics-based Unity 3D game in C# about a personified potato roaming an open world

Please see tommydeng.com for projects