Kieran Colford

Summary of Qualifications

- Extensive professional work experience gained across many business structures (startup, government/military, finance) and technologies (frontend, backend, infrastructure, machine learning, mobile).
- Successfully delivered projects individually and as a team in private and open source settings.
- Consistently recognized as a hard working, self-motivated team leader.
- Canadian Citizen

Languages	Rust, C/C++, C#, Go, Java, Python, Javascript/NodeJS, SQL, and Swift	Devops	GIT, Github, Gitlab, Jenkins, CircleCI, TravisCI, Docker, Vagrant, and Ansible
Cloud	AWS, Digital Ocean, Google Cloud, Firebase, Heroku, Open Stack, Cloudflare, and Netlify	Technologies	Linux (Arch Linux), GatsbyJS, PWA, Tensorflow, WebAssembly, and PostgeSQL
Frameworks	Cordova, React, .NET, Native iOS, Rails, Django, and Native Android	Business	Scrum, Agile, Slack, Trello, and Requirements Gathering

Education

2014–2020 **Bachelor of Computer Science**, *University of Waterloo*, Waterloo, Ontario.
Studied **Advanced Data Structures**, **Algorithms**, Machine Learning, Quantum Mechanics

Experience

Jan.–Apr. 2019 **Senior Development Lead**, *R.C.A.F Aerospace Warfare Centre, Innovation Lab*, Kitchener, Ontario.

- Provided guidance and mentorship to junior developers based on experience gained in multiple technical roles.
- Designed, developed and deployed first mobile financial processing application on **iOS** in **Swift** using **Firebase**, from problem definition through fleet-wide adoption, leading to a reduction in thousands of man hours and reduced time to reimbursement by months.
- Led the adoption of best practice software development life-cycle tooling including **CI/CD**, **Docker** containerization and **Google Cloud Services**.

Sept. 2017–Apr. 2018 **Fullstack Software Developer**, *University of Waterloo, Computer Science Computing Facility*, Waterloo, Ontario.

- Used **Machine Learning** to design and build an Optical Character Recognition pipeline.
- Maintained and improved software and services essential to university operations.
- Converted a large legacy code base from **Python 2** to **Python 3**.

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kcolford • *StackOverflow: randomusername (over 6,000 reputation)*

May.–Aug. 2016 and Jan.–Apr. 2017 **Fullstack Software Developer**, *BlueRover*, Kitchener, Ontario.

- Engineered a trend analytics engine that identifies potential hazards in food preparation thanks to data provided by the I.O.T. (Internet of Things) infrastructure built on top of **AWS**.
- Maintained and expanded major product offerings using **React JS**, innovative tools and techniques.
- Independently developed a multitude solutions for our existing product base in an **agile** environment.

Sept.–Dec. 2015 **Software Developer**, *Ontario Teacher's Pension Plan*, Toronto, Ontario.

- Received an outstanding work term evaluation from my employer.
- Reverse engineered the **MS SQL** database for a third party product, and then developed a **.NET** app for non-developers to view relevant content of the database.
- Designed and produced a backwards compatible service for sending email from enterprise applications using **TIBCO Business Works**.

Awards

2014 **Evgeny Kravchenko Memorial Scholarship**, *University of Waterloo*.

2014 **University of Waterloo President's Scholarship**, *University of Waterloo*.

2014 **AP Scholar with Distinction**, *The College Board*.
Awarded for receiving an average score of at least 3.5 on all AP Exams taken, and scores of 3 or higher on five or more of these exams.

Clubs and Associations

2019–present **Toastmasters**.

Projects

2018 **Archlinux Config Management**.
Wrote and designed a configuration manager using **Ansible** and **Python** for my **Arch Linux** systems.

2017 **Dynamic DNS**.
Designed and developed **shell scripts** to dynamically update **DNS** records for nodes without static IP addresses for reducing costs and improving usability of mobile workstations.

2016 **Linux Firmware Support**.
Developed firmware for supporting the Atmel MaxTouch Touchscreen in the Lenovo Thinkpad Yoga 11e Chromebook (and other devices such as the Google Pixel 2) on vanilla Linux kernels.

2016 **Port of GCC to Course Specific Architecture**.
Ported the GCC to a varient of MIPS specific to the CS 241 course in which students write their own compiler. **(could not publish)**

2015 **UWaterloo AddCourse**.
A Python App that eases the task of getting into courses after the course selection date.

2014 **Boilerplate Generator**.
Developed an easy to use boilerplate generator that analyzes comments in source code and generates code based on those comments.

2014 **Mongoose**.
A fully fledged compiler for a Turing Complete subset of **C**, written in **C**.

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