

Alexander Safatli

SOFTWARE ENGINEER

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“Learning is just like sailing against the current; if you don’t advance, you will be driven back.”

Summary

Recent Research Fellow and PhD Student at Dalhousie University focused on combinatorics, algorithm engineering, and first-order logic. Have led many projects and owned a number of services in e-commerce, privilege/identity management, and networking. 6+ years of diverse software engineering experience notably in architecture design, infrastructure operation, and backend development. Love leading and teaching, enjoy contributing to open source, and is a firm believer in continuous learning and improvement.

Work Experience

Optimize AI Technology Solutions

Halifax, Canada

SOFTWARE ENGINEER

Sep. 2021 - March 2022

- Worked remotely and part-time to maintain and develop for the SafePath mobile app in Flutter to target both iOS and Android devices. Pushed many changes to build the backbone for the SafePath app which was used by hundreds of phone users in Atlantic Canada to plan safe and accessible walking routes using crowdsourced pedestrian and cyclist data.
- Managed software deployment and CI pipelining for the team.

BeyondTrust

Halifax, Canada

SOFTWARE DEVELOPER

Jan. 2017 - Jan. 2018

- Was one of three members tasked with and performed a large part of the software architecture, and later maintenance, of a full stack Angular/Go cybersecurity software deployment suite packaged with other key products from the company marketed to Fortune 100 companies. This software suite was highly praised and is the entry point for product users to install these products.
- Monitored services and managed tooling and devops for the team using tools like Jenkins, Docker, and Kubernetes.

Amazon

Seattle, USA

SOFTWARE DEVELOPER ENGINEER I

Dec. 2015 - Jan. 2017

- Touched, maintained, and real-time diagnosed many components of the website and microservice architecture underlying the Amazon web platform.
- Was on the payment methods team and took the lead of both the cart convergence project that combined a dedicated gift card cart with the main cart people know when using the site. Also took lead in a project enabling cross-border redemption of gift cards bought in one country so they can be redeemed in another, writing regression tests, metrics, and code end-to-end.
- Served on-call on a regular monthly basis to monitor and manage large demand payment method services dealing with high severity issues in a timely manner that impacted millions of customers.

Education

Dalhousie University

Halifax, Canada

DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE (*incomplete*)

Sep. 2020 - Sep. 2023

- Fulfilled all coursework, partial thesis/seminar requirements. Research Fellow for two labs, TA for multiple classes. GPA: 4.3/4.3
- Research focused on algorithm engineering in the area of phylogenetics and first-order logic in the area of health science.

Dalhousie University

Halifax, Canada

MASTER OF COMPUTER SCIENCE

Sep. 2015

- Research focused on combinatorics. Produced a publication and two software libraries. TA for multiple classes. GPA: 4.3/4.3
- Completed a thesis titled *Sampling discrete combinatorial spaces in phylogenetics*.

Dalhousie University

Halifax, Canada

BACHELOR OF COMPUTER SCIENCE WITH DISTINCTION

May 2014

- Undergraduate Student Research Awards internships issued by NSERC for the Summers of 2009, 2012, and 2013. GPA: 4.0/4.3
- Completed an Honours Project focused on geometric morphometrics.

Skills

- Programming** Go, Python, C, Java, Ruby, C#, C++, Lua, TypeScript, Dart, Rust, Swift, Objective-C, Scala, Perl, Prolog, Haskell, Scheme, Matlab, R
- DevOps** AWS, Docker, Kubernetes, Vagrant, Jenkins, CircleCI
- Frameworks & DBs** Angular, Django, Hugo, Ruby on Rails, Flask, Vue, React, Flutter, Mason, MySQL, Mongo, Dynamo
- Languages** English, French, Arabic

Certificates

2024 **Project Management Professional (PMP)**, Project Management Institute (PMI)

Projects & Awards

- 2016 **Pylogeny**, Peer-reviewed and published Python framework for combinatorics in phylogenetics [GitHub](#)
- 2016 **ABeRMuSA**, Python library and CLI developed to perform 3D protein structure alignment [GitHub](#)