Daniel Laufer

Education

University of Toronto

Sept. 2019 - Present

Specializing in computer science and information security; minoring in mathematics Honours Bachelor of Science; currently in third year and expecting graduation in June 2024

3.9/4.0 CGPA (88% average)

Experience

Computer Science Teaching Assistant (CSC209 & CSC148)

Dec. 2021 - Present

University of Toronto

- * Assisted professors in lecture sections (each containing 160 students), marked assessments, invigilated tests/exams, etc
- * CSC209 (Systems Programming) covers topics including Linux, C, Bash, concurrency, etc. CSC148 (Introduction to Computer Science) covers object-oriented programming in Python, runtime analysis, data structures, etc

Google Developer Student Club Technical/Workshop Lead

Aug. 2021 - Present

Google Developer Student Club at the University of Toronto's Mississauga Campus

- * Hosting biweekly technical workshops regularly attended by over 30 UofT students on topics like Git, React, AWS, etc
- * Regularly hosted professional development events such as resume reviews and mock technical interviews for students
- * Empowering students to expand their knowledge in technology and build solutions for their local communities

Full Stack Software Developer Intern

Sep. 2021 - Dec. 2021

We alth scope

- * Developed front-end applications with React and Redux; developing back-end APIs using the Django REST Framework
- * Created a tool that allows users to compare their investment portfolios (consisting of stocks, ETFs, crypto, etc) to determine how various statistics differ between them (including annualized returns, total risk, fees, etc)
- * Created the new 'Retirement Blueprint' tool that guides users through creating personalized investment and saving plans to reach their financial goals
- * Created CI/CD pipelines using GitHub Actions to automatically deploy code changes to AWS EC2 instances
- * Technologies used: React, Redux, Django, Django REST Framework, Python, Pandas, AWS, Docker, PostgreSQL, Jira

Cloud Computing Research Assistant

Sep. 2021 - Oct. 2021

Schulich School of Business, York University

- * Used Google Cloud's Compute Engine and Google Cloud's Cloud Storage to collect *31 million* comments made by Reddit users on the subreddit 'Wall Street Bets' during the years 2019-2021
- * Created a scalable, easy-to-use, and powerful data collection/processing system that evenly distributes the load amongst multiple docker containers running on the Google Cloud Compute Engine

Computer Science Teaching Assistant (CSC148)

Jan. 2021 - Apr. 2021

University of Toronto

* Led weekly tutorial sessions for 80 students, assisted professors in lectures containing 160 students, marked assessments

Technical Skills

Programming Languages/Frameworks/Libraries: Python, SQL, PostgreSQL, React, Redux, C, Java, JavaScript, Node.js, Express, MIPS Assembly, Django, Django REST Framework, Pandas, HTML, CSS

 $\textbf{Cloud/OS/Tools:} \ \, \text{AWS, Google Cloud, Linux/Unix, Docker, Firebase, Travis CI, Git/GitHub, GitHub Actions, Jiravis CI, Git/GitHub, GitHub Actions, Gi$

Certifications: <u>AWS Certified Cloud Practitioner</u>

Other: Object-oriented programming, Software Design Patterns, Software Development Life Cycle, Agile Software Development, SCRUM, UML, Test-driven development

Languages: English (Fluent), Polish (Conversational), French (Basic)

Projects

Kubernetes Flashcard App | GitHub here

- * A web application that allows users to create and share personalized collections of flashcards to assist themselves and others in studying for assessments, learning new languages, and much more
- * Created a microservice system architecture that separates the app into loosely coupled, independently deployable/scalable components which are tied together and accessible through an API Gateway
- * Created CI/CD pipelines using GitHub Actions to automatically deploy new code changes to the codebases on AWS EC2 instances
- * Technologies: Kubernetes, Docker, AWS RDS, AWS S3, PostgreSQL, GKE, Travis CI, Node.js, React, Skaffold, JWT Page 1 of 2

The Textbook Exchanger | GitHub here

- * An online marketplace that facilitates the process of purchasing and selling textbooks among students
- * Created a RESTful API to perform CRUD operations on data and connected it to a front-end made with React & Redux
- * Technologies: React (16.8+ with hooks), Firebase, Firestore, Redux, JavaScript, HTML, CSS, Bootstrap

Interactive Pathfinding Algorithm Visualizer | GitHub here

* A visualization, created with Python, of several pathfinding algorithms including 'A*' and 'Dijkstra's Algorithm'

XMODEM File Server | CSC209 Systems Programming Project at the University of Toronto

* A server, written using the C programming language, capable of transferring files to multiple clients simultaneously using the XMODEM file transfer protocol

MIPS Assembly Doodle Jump | CSC258 Computer Organization Project at the University of Toronto

* A recreation of the classic Doodle Jump mobile game written using the MIPS Assembly language

Relevant Coursework

University Courses: Software Design with Java, Data Structures and Analysis, Systems Programming (Linux, Bash, C), Computer Organization/Architecture (MIPS Assembly & Computer Hardware), Theory of Computation, Introduction to Computer Science, Probability and Statistics, Linear Algebra I & II, Multivariable Calculus

Other: Modern React with Redux, Database Design & PostgreSQL, Intermediate PostgreSQL, The Complete Guide to Docker and Kubernetes, Introduction to Data Science with Python, Applied Plotting/Charting & Data Representation with Python. Please visit my LinkedIn page to learn more about these courses.

Awards and Achievements

*	University of Toronto Mathematical and Computational Sciences 2020-2021 Honour Roll	Jun. 2021
*	University of Toronto Dean's List Scholar	Sep. 2020
*	University of Toronto Scholar	May 2019
*	ECOO Programming Competition Semifinalist	Apr. 2019
*	Finished first place in my school board at the Halton Skills Competition for Robotics	Apr. 2019
*	Ranked in the top 25% of all contestants at the Canadian Computing Competition	Feb. 2018