

Dmitriy Prokopchuk

☎ 437-984-8517 ✉ dimprokopchuk@gmail.com [in](#) [Linkedin](#) [G](#) [Github](#) [G](#) [Portfolio](#)

Passionate 3rd year CS student with a background in Back End, Cloud, API, and Microservice development. Seeking an internship in Back End, Cloud, and Software Engineering to create scalable, performant, and reliable solutions.

Education

University of Toronto

Sep 2021 – Jun 2025

Honours BSc Computer Science Co-op | **4.0/4.0 GPA** | Dean's List 2021-2023

Toronto, ON

- Lester B. Pearson Scholarship - Full-ride | **\$350 000+**
- 2022 UofT Excellence Award - Summer Research Fellowship | **\$7500**
- 2022 UofT Scholar In-Course Award - Top 20 students entering second year | **\$1500**

Courses: Design & Analysis of Data Structures, Software Design, Intro to Databases & Web Applications

Experience

Undergraduate Research Assistant

Feb 2023 – Present

University of Toronto, Computational Social Science Lab

Toronto, ON

- Led the back-end systems design and development for a Chess AI platform **API** for providing machine learning analyses using **Python, FastAPI, MongoDB, Nginx, Git, and Docker**.
- Developed critical **RESTful** back-end accounts, data collection, caching, game ingestion, and user statistics systems.
- Optimized **asynchronous** parallel job queues for processing **AI** analyses to improve API endpoint response times by **1000%+**, and refactored existing code to increase server stability and uptime by over **2x**.

Software Developer Co-op

May 2023 – Aug 2023

Royal Bank of Canada

Toronto, ON

- Created scalable cloud-native **REST API microservices** for payment transaction systems in an **Agile** team using **Java, Springboot, Microsoft Azure, Kafka, Elasticsearch, and Git**.
- Brought **OAuth2** security, token parsing and verification systems to an entirely new payments API layer, ensuring security for **10000+** daily high-volume B2B transactions.
- Implemented database-linked feature flags to repoint internal API calls in line with other teams' API downtime using **MS SQL Server and Togglz**, increasing uptime by **30%**.

Undergraduate Research Assistant

Nov 2021 – May 2023

University of Toronto, Ontario Institute for Studies in Education

Toronto, ON

- Created **25+** web-scrapers using **Python, BeautifulSoup4, and Selenium** to aggregate a worldwide university metrics database, resulting in a UTEA research award valued at \$7500.
- Engineered data discrepancy flagging systems for **CSV and SQL** DBs, allowing for streamlined research analysis.

Software Engineer Co-op

Sep 2022 – Dec 2022

PointClickCare

Mississauga, ON

- Developed and unit-tested authentication, authorization, and DB back-end systems for **4** data processing cloud ETL pipeline **REST APIs** using **Java, Springboot, OAuth2, Kafka, and MS SQL Server** in an **Agile** environment.
- Enabled the deployment of multiple microservices to a **Jenkins** pipeline and set up integration with multiple **Microsoft Azure** services using **Helm Charts and Terraform** scripts.

Projects

Distributed Cloud Compute Framework | *Java, Kubernetes, Docker, PostgreSQL, Kafka, Springboot* | [GitHub](#)

- Created a **scalable** distributed computing framework tailored for the cloud.
- Implemented processing for custom **Docker**-based jobs with **Springboot**, and asynchronous job-queues with **Kafka**.
- Enabled horizontal scalability with **Kubernetes**, with real-time job tracking over a **PostgreSQL** Database.

Full-Stack Music Visualizer | *Java, Springboot, ReactJS, p5.js, Docker, Azure, Netlify* | [GitHub](#)

- Implemented a **Java and Springboot REST API** for uploading and downloading music over **HTTP** protocols.
- **Containerized** Springboot application and deployed using **Docker, Microsoft Azure, and Netlify**.
- Developed a web-based music player that visualizes the audio frequency spectrum using **ReactJS and p5.js**.

Clubs & Volunteering

Google Developer Student Clubs

Sep 2023 – Present

Director, Partnerships

Toronto, ON

- Helping expand GDSC to University of Toronto's Scarborough Campus for the first time ever.

Technical Skills

Languages & DBs: Java, Python, MS SQL Server, PostgreSQL, MongoDB, Elasticsearch, Bash, C, JavaScript, HTML, CSS
Frameworks: Springboot, Azure, FastAPI, ReactJS, Flask, Firebase, Selenium, Agile
Tools: Docker, Kubernetes, Kafka, Jenkins, Jira, Git, Nginx, Terraform, Maven, OAuth2