

ZACHARY BYS
zachary.bys@gmail.com
github.com/zacharybys

EDUCATION

CONCORDIA UNIVERSITY *B.Eng. in Software Engineering*

MONTREAL
EXPECTED GRADUATION: MAY 2021

- 4.05/4.30 GPA (Cumulative)
- Awarded the *Hydro Quebec Entrance Scholarship* and the *Peter Matthews Memorial Scholarship* on academic merit
- **Relevant Courses:** OOP, Data structures and algorithms, Web, Operating systems, Software Architecture, Networks, AI

WORK EXPERIENCE

AMAZON (AMAZON WEB SERVICES)

VANCOUVER, BC

SOFTWARE ENGINEERING INTERN

MAY 2019 – AUGUST 2019

- Implemented from scratch a DNS Proxy in C#, that parses TCP/UDP DNS requests from customer instances and routes them based on their content, and fetches customer information with the DHCP Protocol.
- Project will be fully deployed on over 80,000 customer RDS SQL Server instances.

COVEO SOLUTIONS

MONTREAL, QC

SOFTWARE ENGINEERING INTERN

MAY 2018-AUGUST 2018

- Developed a throttling system on AWS Lambda for logs queried from Elasticsearch, using Java.
- Implemented a stream pusher for sending documents to the platform using our Push API, which sends them to RabbitMQ in batches, increasing performance and decreasing peak memory use.

EIDOS MONTREAL (SQUARE-ENIX GROUP)

MONTREAL, QC

GAMEPLAY PROGRAMMER INTERN

SEPTEMBER 2017 – MAY 2018

- Implemented over 30 new gameplay skills, 20 outfit effects and 3 unique temporary buffs for the AAA title *Shadow of the Tomb Raider*, with UI for designers to interact with them, using C++ and an internal game engine.

ACADEMIC SOCIETIES

HACK CONCORDIA

CO PRESIDENT

MAY 2019 - PRESENT

- Leading the team for ConUHacks V. Coordinating and leading activities with the other VPs and Directors, including sponsorship, logistics, communication, events, and finance.

VP TECH

MAY 2018 – MAY 2019

- Team lead for tech for the hackathon ConUHacks IV, where we welcomed 764 participants. Worked on several projects such as the registration website, the society's website, and our tracking and organizing systems used during the event.

PROJECTS

WIKIPEDIA ALPHA

- Integrated many new features into the Wikipedia mobile application for Android, such as image lookup, note taking, a tool to save article snippets, smart categories, selective translation, and more.

BONJOUR-HI

- Built a multilingual video chat room with Flask, Sockets and React. The web app allows group video calls in multiple languages with voice translation, so all participants can understand each other.

HACKATHON AWARDS

HackCU 2019 – 1st place for the Blockchain challenge, and the Twist API Challenge

FEBRUARY 2019

McHacks 2019 – 1st place for the RBC Fintech challenge, TD fintech and Interac Challenge

FEBRUARY 2019

Yale Hack 2018 – 1st place for Facebook's Mission

DECEMBER 2018

McGill Robohacks - 1st place overall

MARCH 2018

ConUHacks III - 2nd place overall and 1st for the IBM Challenge

JANUARY 2018

TECHNICAL SKILLS

Programming Languages: Java, C#, Python, C++, JavaScript (React.js, Node.js), HTML/CSS, SQL

Tools and Technologies: Android, AWS, .NET, Git, Flask, Arduino, Docker, Visual Studio, Spring, Firebase, MongoDB