

KHOA BUI

khoabuiv@gmail.com

+1 (587) 974-6826

WORK EXPERIENCE

Pythian

Sep 2022 - Present

Database Associate

- Implemented cost optimization measures to save a client an estimated \$43,000 in yearly billing on MongoDB Atlas
- Configure and optimize a fleet of up to 72 AWS RDS instances.
- Managing and optimizing a sharding cluster of 42 MongoDB servers.
- Implemented an encryption-at-rest scheme for a major music streaming server.
- Troubleshooting outage issues relating to database, networking, and security.
- Migrated a MariaDB cluster to Google Cloud Platform(GCP).
- Provide documentation and participate in knowledge transferring between Pythian and our clients.
- Deploying monitoring systems using Prometheus and PMM

Concordia University of Edmonton

May 2020 - Sep 2022

Research/Teaching Assistant

- Implemented the lattice reduction Lenstra–Lenstra–Lovász(LL) algorithm in C and Python.
- Implemented elliptic curve's point arithmetic and cryptography schemes in Python.
- Provided one-on-one tutoring for a group of 15 students
- Implemented a reinforcement learning A.I. based on Monte Carlo Tree Search to play placement games.
- Developed lecture and lab activities to introduce students to topics in calculus and using software for mathematical research.

Novaco Pharmaceuticals

June 2017 - August 2017

Accounting Assistant

- Organized medicine shipping orders and billings on Microsoft Excel.

EDUCATION

Georgia Institute of Technology

August 2024 - Ongoing

Online Master of Science in Cybersecurity

Concordia University of Edmonton

September 2018 - May 2022.

4th year, Mathematics and Information Technology Double Major

GPA: 3.49.

University of Alberta

September 2017 - May 2018.

CERTIFICATIONS

MongoDB Certified Developer, Associate (C100DEV)

Issued Jan 2023

MongoDB

MongoDB Certified DBA Associate (C100DBA)

Issued Jan 2023

MongoDB

PCA: Prometheus Certified Associate <i>The Linux Foundation</i>	Issued Nov 2023
Linux Foundation Certified IT Associate (LFCA) <i>The Linux Foundation</i>	Issued Oct 2022 - Expires Oct 2025
Apache Cassandra 3 Associate Administrator <i>DataStax</i>	Issued Dec 2022
Apache Cassandra 3 Associate Developer <i>DataStax</i>	Issued Nov 2022
AWS Certified SysOps Administrator – Associate <i>Amazon Web Services(AWS)</i>	Issued June 2024
AWS Certified Database – Specialty <i>Amazon Web Services(AWS)</i>	Issued April 2024
Neo4j Certified Professional <i>Neo4j</i>	Issued April 2024
AWS Certified Cloud Practitioner <i>Amazon Web Services(AWS)</i>	Issued Sep 2023