

BANIN ABRAR

Prospective software engineer with a strong interest in Data Engineering and Distributed Systems with experience in building data warehouses and monitoring systems.

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SKILLS

- **Languages & Frameworks:** Python, Rust, C/C++, Golang, TypeScript, Java, SQL, Perl; React.js, Django, GraphQL
- **Tools:** Kubernetes, Terraform, AWS, GCP, gRPC / Thrift, Apache Kafka, Spark, Prestodb, Elasticsearch, dbt, PostgreSQL

EDUCATION

University of Waterloo

Class of 2023

Bachelor of Applied Science in Computer Engineering

- Courses: Programming for Performance in Rust, Distributed Systems, Computer Networks & Security, Operating Systems, Compilers, Database Systems, Software Design and Architectures, Data Structures and Algorithms

WORK EXPERIENCE

Software Engineering Intern, Full-Stack

Sep 2022 – Dec 2022

PlayStation, San Diego, CA

- Developed a single-page application in React to enable easy DB management, improving productivity for **30+** engineers
- Built a flexible Kubernetes controller to provision database instances on-demand, saving the team **~50 hours/month**
- Streamlined access to critical information by implementing fuzzy text search for documents hosted on docuaurus

Software Engineering Co-op, Database

Jan 2022 – Apr 2022

Arctic Wolf, Waterloo, ON

- Created an efficient data monitoring system in Go which detected and resolved under-sharded indices in Elasticsearch, resulting in reduced CPU usage during peak hours and a **50%** decrease in performance-related alerts.
- Automated repetitive tasks related to the removal of inactive records and database settings, reducing manual workload

Analytics Engineering Intern, Business Insights

Jan 2021 – Aug 2021

Sheertex, Montreal, QC

- Spearheaded the implementation of a new high-performance data stack using Snowflake and dbt, saving data analysts over **10 hours/week**, eliminating all data errors, and providing more accurate insights to stakeholders.
- Consolidated e-commerce data across multiple sources to serve as a foundation for future data-related initiatives

Software Engineering Intern, Cost Optimization

May 2020 – Aug 2020

Loblaw Digital, Toronto, ON

- Successfully migrated logging infrastructure from Splunk to Google's Stackdriver platform using Terraform and BigQuery SQL scripts, achieving over **\$50K** in annual savings, while incurring minimal performance penalties.

Data Engineering Co-op, Data Ingestion

May 2019 – Aug 2019

FLIR Systems, Waterloo, ON

- Architected a data lake setup using Presto to address rapidly evolving schema, reducing latency on reads from S3 by **60%**

Software Developer Intern, Full-Stack

Sept 2018 – Dec 2018

JANA Solutions, Aurora, ON

- Shipped a full-stack application in Django to serve the company's core statistical modelling software to **10+** clients

OTHER EXPERIENCE & PROJECTS

Waterloop Student Design Team, University of Waterloo

- Revamped a static web page into a dynamic MERN stack-based website, enriched with new features and functionalities focused on enhancing user experience and streamlining deployment through containerization of the entire platform.

UW Midnight Sun - Solar Race Car, University of Waterloo

- Conducted research on optimization problems related to the practical application of solar cell modules on a race car

FastOLAP, [babrar/fastolap](#) 🐙

- An open-source fork of AWS Athena for performing fast analytic SQL queries on large datasets hosted on Amazon S3