BANIN ABRAR

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Summary

- · Languages: C/C++, Python, JavaScript (ES6, TypeScript), Golang, Perl, SQL, Bash, VimScript
- · Tools: GCP, MongoDB, Postgresql, Node.js, React, GraphQL, Docker, Postman, RESTful design

EXPERIENCE

Loblaw Digital

Software Engineering Intern (Billing Optimization)

May – Aug '20 Toronto, ON

· Built internal tools to assist Site Reliability Engineering teams with billing optimization in GCP.

- · Saved \$50,000 anually by writing <u>Terraform</u> and BigQuery SQL scripts as a part of an SRE initiative to migrate logging infrastructure completely from Splunk to serverless Stackdriver (GCP).
- · Created a cross-platform chatbot using Botkit and Node.js. to deliver cloud data and visualizations.

FLIR Systems Inc. (Aeryon Labs)

Software Engineering Intern (Infrastructure)

May - Aug '19 Waterloo, ON

- · Architected a cloud-agnostic data warehouse solution using open source technologies to handle rapidly evolving schemas and to unify data tooling across all engineering teams.
- · Achieved 60% lower latency on read times from data warehouse by creating a <u>Presto-Hive</u> setup.
- · Configured single sign-on for web application and internal services using OpenID Connect in Okta.

JANA Solutions

Sept – Dec '18

Software Engineering Intern (Core)

Aurora, ON

- · Built a data analytics backend in Django for the company's core probabilistic modelling software.
- · Improved company-wide asset data retrieval time from Postgres by 10x by refactoring core schemas.
- · Added visualization features to existing data analysis tool using React.js components in Dash.

Integrated Device Technology, Inc.

Jan - Apr '18

Software Engineering Intern (Video Compression)

Waterloo, ON

· Accelerated frame processing rate by 12% using AVX-512 instructions for wider memory operations.

OTHER EXPERIENCE

UWaterloo Midnight Sun - Solar Race Car

· Researched non-linear optimization problems pertinent to the application of solar cells modules.

Waterloop Student Design Team

· Migrated a static website onto the MERN stack complete with new features and functionalities.

PROJECTS

LTor git.io/JkkPC

· Web-based BitTorrent client that uses WebRTC and UDP trackers for P2P file transfers.

Other projects/open-source contributions: ubuntu/gnome-shell, geekcane (IoT)

EDUCATION

University of Waterloo

Class of 2023 (expected)

Candidate for Honours Bachelor of Applied Science in Computer Engineering

· President's Scholarship of Distinction for having more than 95% admission average.