# JULIUS PARK

### **SKILLS**

Languages Rust, Go, Python, C#, C++, JavaScript, SQL

Frameworks Axum, React, Angular, TypeScript, PostgreSQL, .NET, Gin, GraphQL, Node.js, Next.js

Tools AWS S3, EMR, Docker, Git, Redis, Nginx, Grafana

### **EXPERIENCE**

### Software Engineer, R&D

July 2023 - Present

ComputerTalk Technologies

Remote

- Developed a real-time statistics dashboard in **TypeScript** and **Next.js**, integrating agCharts to enable live tracking of 100,000+ statistics, generating over \$2 million CAD in enterprise sales
- Optimized low latency IVR infrastructure in Rust, Redis handling 10,000+ concurrent calls at sub 30ms
- Built back-end microservices to categorize IVR provider metadata using Azure Service Bus, SQL and gRPC
- Created a **real-time AI adapter** for IVR systems, using **Whisper** for transcription, **GPT-4** for intent recognition and dynamic response generation; integrated context-aware dialogue state management via **Azure OpenAI**

## Software Developer Intern

Sept. 2022 – Dec. 2022

Remote

OpenText

- Developed microservices to enable modular features in dashboard using React, GraphQL, SpringBoot
- Collaborated on cache manager to optimize SQL queries on 10M+ statistics, achieving sub 900ms responses
- Implemented pipeline using the ELK stack (Elasticsearch, Logstash, Kibana) to centralize logs

#### Project Designer Intern

Jan. 2022 – Apr. 2022

Arcadis IBI Group

Remote

- Developed Civil 3D design tool using .NET and ObjectARX to update grading plans with 20 parameters
- Collaborated with internal LD team to export survey data in AutoCAD, improving design time and services
- Managed communication with subconsultants, coordinated project information transfer, reviewed plans

### Quality Assurance Intern

Sept. 2018 - Dec. 2018

Economical Insurance

Remote

- Developed Jasmine unit test scripts, utilized QTP to improve client address accessibility and vehicle status
- Collaborated with team of developers on the visualization of vehicle trackers in React for improved user input
- Improved PostgreSQL query speed by 30%, designed models to support imported data from Snowflake data stores

### **EDUCATION**

### University of Waterloo

Waterloo, ON

Bachelors of Applied Science Degree - Honours Engineering

Graduated June 2023

- Nov 2017: University of Waterloo President's Scholarship
- Nov 2019: Professor. Khaled Soudki Design Competition; Awarded Winning Team
- Relevant Courses: Algorithms, Data Structures, UI/UX, OS, Databases, Image Processing, Networks, A.I., HCI
- CAPSTONE Designed a dynamic traffic control solution for Toronto's congested urban areas. Using Dynamic Mapping and Resilience-Based Adaptive Traffic Signal Strategy, real-time traffic flow was adjusted per minute to reduce travel time, lower vehicle emissions, and support sustainable energy through reduced idling and electric vehicle prioritization. (Python, SQL, Flask). Featured on University of Waterloo 2023's Engineering Showcase. (Rade Solutions).