Jared Paul

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Education

University of British Columbia May. 2023
Bachelor of Applied Science, Computer Engineering with Distinction *Vancouver, BC*

Experience

Software Development Engineer Jan. 2024 – Present
Amazon - Prime *Vancouver, BC*

- Led deprecation of legacy service across 20+ cross-functional teams, delivering $200,000+ in annual cost savings
- Designed and launched customer service integration for local payment method in Spain, contributing to 15% increase in regional Prime member acquisition rate
- Migrated legacy service to GraphQL-based system, including data model redesign, comprehensive testing, and performance optimization, achieving 66% latency reduction
- Led correction of error (COE) incident resolution for critical service collaborating across 4 organizations and additionally identified cost optimization opportunities that reduced service expenses by 31%

Software Engineer Aug. 2023 – Jan. 2024
Dexa.ai *Remote*

- Developed the search interface using TypeScript, enabling users to pinpoint niche insights from 10,000+ videos
- Implemented authentication system including Google OAuth integration to streamline user onboarding
- Automated a way to identify and categorize experts from general speakers, eliminating manual intervention in the ingestion pipeline and increasing processing rate by 1000% (from 10 to 100 videos per week)

Software Development Engineer Intern May 2022 – Aug. 2022
Amazon *Vancouver, BC*

- Worked and coordinated with multiple different teams to push new payment methods for Amazon Prime
- Created a web application using React to perform MFA challenges for all payment methods, cutting QA testing costs from $90,000 to $1,000 and reducing testing time from 5 weeks to 1 week

Undergraduate Research Assistant May 2021 – Aug. 2021
University of British Columbia *Vancouver, BC*

- Worked under the supervision of Professor Sathish Gopalakrishnan on algorithmic scheduling problems related to intermittent batteryless systems
- Co-authored and published research paper at the IEEE Real-Time Systems Symposium (RTSS) 2022

Software Engineer Intern May 2019 – August 2019
Maru Group *Vancouver, BC*

- Constructed a Job Queue API in php using Redis to allow the execution of tasks asynchronously
- Designed a system in C# to evaluate system resources over the execution time of SQL Server queries

Projects

UBC Thunderbots | *C++, Python, PyQt* github.com/UBC-Thunderbots/Software

- Developed fully-autonomous soccer playing robots competing in the international RoboCup Competition
- Rewrote the calculate best shot algorithm achieving a 70% speed improvement verified by profiler analysis
- Crafted a physics-realistic C++ and Python simulator using Qt to test and visualize robot behavior

Karaoke Machine - Juicebox | *Rust, TypeScript* github.com/juice-joint/juicebox

- Built a fully functional YouTube-based karaoke machine in Rust using Tokio and Axum, achieving a reduction from 100% CPU usage to 25% when compared to Python approach
- Authored a custom actor framework to achieve efficient concurrency and message-passing between components
- Implemented MPEG-DASH with ffmpeg pitch shifting to enable streaming different audio keys

Technical Skills

Languages: Java, Python, C/C++, Rust, C#, SQL (Postgres, MySQL, SQLServer), JavaScript, TypeScript, HTML/CSS, Verilog/SystemVerilog
Frameworks: React, Node.js, JUnit, Qt, Tokio, Axum
Developer Tools: Git, Docker, Redis, Linux, TravisCI, OpenAI APIs, Pinecone