Ishan Jaidka

(425) 770-0077 || ishan@jaidka.dev || Github: Ishan-Jaidka

WORK EXPERIENCE

JumpShot, Inc. — *Kent, WA* Nov 2022 - Present

Software Engineer

- Designed a full-stack prototype for a next gen basketball entertainment venue, integrating React, Node.js, and MongoDB for seamless game management and UX.
- Created an HMI and custom sensor modules communicating via MQTT and Modbus to enable real-time gameplay on a PLC-operated machine.
- Trained and implemented a custom computer vision model to track players and basketballs in low-light conditions using Python, CVAT, and Roboflow.
- Engineered real-time synchronization between hardware, AI, and UI with Socket.io, MQTT, & Modbus to enable live gameplay with dynamic graphics.
- Created AI-powered games, leveraging LLMs to dynamically generate gameplay.
- Co-invented hardware/software solutions described in 4 patent applications.
- Delivered a prototype experience that secured >$5m of investor funding.
- Produced specifications and vetted vendors to iterate & scale into final production.

GetSetUp — *Remote* Mar 2022 - Nov 2022

Software Engineer

- Owned full-stack development to reduce support costs by >$1M/yr by automating agent workflows and minimizing ticket volume, collaborating with support leads:
  - Migrated to Zendesk CRM by building a custom help center, integrating the chat widget, and connecting user databases via event-driven microservices.
  - Developed services to import existing data and to merge contextual data into Zendesk tickets for class chat sessions, enabling agents to identify users.
- Implemented event-based UX tracking to measure the impact of interface optimizations on search performance and user engagement.

PROJECTS

Capstone — *Automated Greenhouse*

Led a team of 4 to develop a modular greenhouse automation system with real-time data collection & a mobile app interface. Awarded Best C.S. Capstone Project 2022.

- Prototyped and built custom ESP32 based modules connected to AWS IoT Core for real-time sensor data upload & low voltage control via MQTT communications.
- Deployed a scalable AWS-hosted API for user data access and controls.
- Engineered AWS RDS & Timestream DBs to efficiently manage large-scale data.
- Built a user-friendly Android app with Kotlin for intuitive control and monitoring.

Ski DIN Calculator

Calculates ski binding release tension (DIN) based on a user's information.

API: Designed and built a REST API on AWS to handle calculations.

Android App: Built with Android Studio and Java; >3000 downloads, 5 star rating.

Website: Built using React, Javascript, & HTML/CSS.

PROGRAMMING LANGUAGES

Javascript, Typescript, Python, SQL, Java, C++, C#, Kotlin, HTML/CSS

AUTOMATION & ROBOTICS

Microcontrollers, MQTT, Modbus, PLC systems, Limit switches, Sensors, Motion controllers, Low voltage control circuits, I/O systems

TECHNOLOGIES

Node.js, React, Docker, Linux, Unix, Git, Github, Socket.io, MySQL, Algolia, Zendesk, Microservices, MongoDB

CLOUD EXPERIENCE

AWS: Lambda, S3, RDS, API Gateway, IoT Core, Timestream, CloudWatch, SQS, SNS, DynamoDB, Rekognition, IAM, EC2, CloudFormation

Other: Heroku & Vercel (Node.js, Github CI/CD)

EDUCATION

Bellevue College

GPA: 3.74

B.S. Computer Science

Cum Laude

Jan 2019 - Jun 2022

INTERESTS

Robotics, Working on cars & motorcycles, 3D modeling & printing, PC building, Cooking, Skiing, Hiking with my dog, Bicycling