Rishi Patil

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Education

University of Wisconsin-Madison — Madison, WI

Bachelor of Science in Computer Science; Bachelor of Science in Data Science - GPA: 3.91 — *December 2024*

Experience

Software Engineer — June 2025 – Present

Amazon — *Seattle, WA*

- Reduced overall support ticket queue by 7% and cut user wait time by an average of 24 hours by designing and implementing a self-service permissions system
- Improved observability for an agentic purchase order initiative by leading the implementation of custom AWS CloudWatch RUM events and building 30+ dashboards, enabling real-time monitoring of critical customer workflows
- Reduced deployment time by 75% and increased release frequency by designing and implementing a comprehensive Playwright end-to-end test suite that automated manual pre-deployment validation and improved release reliability

Software Engineering Intern — May 2024 – July 2024

Expedia Group — *Seattle, WA*

- Improved monitoring and data visualization for over 1,000 services by developing and deploying a fault-tolerant Python script on AWS Lambda that dynamically generates Datadog tags from JSON logs
- Reduced system resolution time by 4 hours, runtime by 50%, and errors by 90% by automating data visualization and time-stamping services in Datadog, improving system reliability
- Enabled seamless and reliable deployment for 23,000 daily invocations by implementing a CI/CD pipeline with unit testing, Docker containerization, Spinnaker, and GitHub Action triggers

Projects

First Direction | *Swift, ARKit, Cloudflare, Docker, Python, Flask, Git* — January 2024 – May 2024

- Enhanced accessibility and reduced user travel time by 20% by engineering an AR indoor navigation app with a SwiftUI front-end to optimize routing in large buildings in collaboration with Last Lock Inc.
- Boosted navigation efficiency and attained 95% accuracy in performance testing by utilizing ARKit to create a USDz room scan, optimized with A* search in a back-end REST API for quickest path-finding
- Delivered less than 2-degree deviation in path overlay precision by integrating the iPhone gyroscope and camera to overlay paths on the floor using real-time data tracking

CaneSense | *Python, PyTorch, Arduino, Edge Impulse, Git* — September 2023 – December 2023

- Designed a walking cane attachment for the visually impaired, enabling real-time surface wetness detection with an average of 1.5 milliseconds per prediction by integrating computer vision capabilities into a single-board computer with low processing power
- Refined surface wetness detection performance, achieving an overall accuracy of 92%, by rigorously testing the model's effectiveness with accuracy scores, saliency maps, and image probability scoring

Technical Skills

Languages: Java, C, C#, C++, Python, JavaScript, Go, HTML, CSS, R, SQL, Swift, TypeScript

Frameworks: Svelte, React Native, Tailwind, .NET Framework, Flask, SwiftUI, Spark

Developer Tools: Git, Google Cloud Platform (GCP), AWS, Azure, Linux, GNU Make, Docker, Spinnaker, Datadog, Cassandra, Firebase, Kafka, BigQuery, HDFS, Supabase

Libraries: React.js, JavaFX, JUnit, Matplotlib, Selenium, PyTorch, OpenCV, jQuery, FXGL, ARKit