Girish Dodda

(224) 294-8119; girishbdodda@gmail.com; mrblacklicorice.github.io; Linkedin: girish-dodda-03b280205; Github: mrblacklicorice

EDUCATION

UNIVERSITY OF OHIO - COLUMBUS Columbus, OH
MS Computer Science Engineering Expected May 2026
Cumulative GPA: N/A (First Sem)
Relevant Coursework: Adv Surv of Artificial Intelligence; Adv Operating Systems; Computer Vision, Game Development

UNIVERSITY OF WISCONSIN - MADISON Madison, WI
BS Computer Science, BS Data Science May 2025
Cumulative GPA: 3.75/4.0; Dean's List 2022-2023, 2025
Relevant Coursework: Data Structures & Algorithms; Computer Engineering; Artificial Intelligence; Data Management; Machine Organization; Operating Systems; Mobile Systems

WORK EXPERIENCE

Image Guided Therapy Research Lab led by Dr. Robert Jeraj Madison, WI
Research Assistant Nov 2024 – Aug 2025
- Analyzed and generated comprehensive statistics from 87 patients' lesions and conducted optimal feature analysis through Python's Scikit-Learn and Statsmodels improving accuracy by 23% compared to existing models.
- Developed custom ETL data pipeline to automate pet scan image processing utilizing pandas and SQS and conducted thorough tetration experiments to analyze the effect of the sample size on the model's predictive power

Duo Arts Remote
Full-Stack Developer Jun 2024 – Aug 2024
- Developed a web portal for artists to manage their artworks and commissions using C#, ASP.NET, and Knockout.js
- Created new scalable database system to store image and artist metadata utilizing SQL Server and .NET pgAdmin capable of handling over 200 requests per minute and storing 800GB+ of artist data
- Designed new REST API endpoints for transferring artist metadata between microservices utilizing .NET with robust data validation and automatic retries reducing request failures by 6%

Wisconsin Messenger Remote
Software Developer Jun 2024 – Nov 2024
- Developed over 8 Python-based web scraper workflows using beautiful soup to aggregate and standardize news articles.
- Fine-tuned a transfer learning LLM model (BERT) achieving 97% test accuracy for custom article categorization.

PROJECTS

MiniSpark
- Designed and implemented MiniSpark, a simplified distributed computing framework in C inspired by Apache Spark.
- Built custom RDD abstractions and execution graphs to support lazy evaluation, transformation chaining, and dependency tracking reducing redundant CPU cycles by 24%
- Implemented multithreaded task scheduling using POSIX threads, locks, and condition variables to manage concurrent stage execution and ensure basic fault tolerance enabling near 100% CPU utilization and reducing idle core time.

Jobbr - Job Board Scheduler
- Designed and deployed scalable job scraper system to monitor 10+ company career pages using containerized AWS ECR Python scrapers scheduled via EventBridge and executed on ECS Fargate
- Built dynamic dispatcher and SQS-based queue with Lambda for parallel, fault-tolerant execution with retries and alerts
- Archived scraper logs and structured data to S3 with metadata in DynamoDB, enabling traceable job history and daily change tracking with custom email notifications

DSync - Passcode App for Wear OS
- Built an automated scraper and API to retrieve and serve Duo temporary passcodes on demand, with support for refresh triggers and low-supply detection logic.
- Integrated GitHub Actions for scheduled execution and on-demand scraping, reducing manual 2FA code retrieval effort by 90%.
- Made client apps in Chrome and Wear OS to securely deliver over 700 passcodes in under 300 ms per request.

Ready, Set, Go! (St3am - Best Engineering & 2nd Best Overall)
- Built a custom WiFi client-server system for real-time classroom polls and surveys using Arduino IoT nodes.
- Designed a pub-sub protocol supporting 50+ concurrent clients with <20ms avg latency and TCP-based failure recovery.
- Implemented real-time data aggregation and formatting to relay detailed responses to instructors in under 500ms per session.

ADDITIONAL

Technical Skills: JavaScript; HTML 5; CSS; Java; Arduino(C++); Python; Tensorflow; Android SDK; Kotlin; Node.js; R; Git; Github; Jupyter Notebook; SQL; MongoDB; C; .NET; Torch; AWS (Lambda, SQS, ECS Fargate, S3, DynamoDB); AWS CDK