Anirudha Kyathsandra

Work Experience

General Dynamics Mission Systems

June 2025 – Present

Software Engineering Co-op

McLeansville, NC

- Built scalable alert management microservice using Java Spring Boot, Docker, Kubernetes, RabbitMQ, and gRPC to handle real-time health monitoring and route critical alerts, reducing system response time by 30%.
- Led UI software testing automation for **mission-critical** hardware monitoring applications using **bash scripting** and **Eggplant**, reducing test execution time by **35**% and accelerating development cycles for defense systems.
- Developed comprehensive software test plans and requirements documentation for microservices, implementing JUnit and Google Test suites to ensure 95%+ code coverage and system reliability.

University of Illinois Urbana Champaign (UIUC)

Aug 2024 – May 2025

Teaching Assistant/Mentor – Software Design Lab

Champaign, IL

Mentor 4 student teams through software development projects, progress tracking, achieving 100% project delivery.

General Mills

Jul 2023 – Aug 2024

Software Engineer

Minneapolis, MN

- Engineered Shelf Life Application using Next.js, React, TypeScript, RESTful APIs, and GCP, saving \$2.5MM with \$20MM+ cost avoidance across 50+ plants and earning Bell Achievement Award.
- Developed dynamic food box labelling system using **VB.NET**, **C**#, and **MySQL**, implementing customizable nutritional and allergen features, improving accuracy and reducing compliance errors by **30**%.
- Architected ETL data pipeline using GCP, Hasura, Jenkins, Docker, and MySQL to automate data transmission to SaaS platforms, improving sync efficiency by 60% and eliminating 8 hours of manual work weekly.

 ${\rm John \; Deere} \qquad \qquad {\rm May \; 2022 - Dec \; 2022}$

Software Engineering Intern

Des Moines, IA

- Developed automated image detection system using C++, OpenCV, CUDA, and Linux for weed detection, achieving 90%+ accuracy and eliminating field testing costs.
- Built image injection system using C++, OpenCV, and real-time systems, enabling engineers to inject synthetic objects into camera feeds for scenario testing, accelerating development by 40%.

John Deere May 2021 – Jul 2021

Software Engineer Intern

Des Moines, IA

• Built automated testing pipeline using Python, Jenkins, Git, and Linux, reducing field testing requirements and giving engineers back 30% of their work time.

Education

University of Illinois - Urbana Champaign

Aug 2024 - Dec 2025

Master's in Computer Science — GPA: 3.76/4.00

Urbana, IL

Iowa State University

Aug 2019 - May 2023

Bachelor of Science in Computer Science with a minor in Business — GPA: 3.80/4.00

Ames, IA

Projects

- Election Predictor Analytics Platform Built ML-powered election prediction system using Python, scikit-learn, and spaCy for sentiment analysis, achieving 87% accuracy across battleground states. Developed interactive React dashboard with real-time polling data visualization and state predictions, processing 10,000+ daily social media posts.
- IntelliMatch Resume Platform Architected serverless resume parsing system using AWS Lambda, S3, OpenAI API, and Python NLP, automatically extracting skills and qualifications from PDF/Word documents. Implemented job matching algorithm using TF-IDF vectorization and cosine similarity.
- Iowa State University Cloud Club, Founder & Treasurer Founded cloud computing club, organizing AWS training sessions for 50+ students.

Technical Skills

Languages: Java, JavaScript, Python, C++, SQL, TypeScript, Bash, C.

Frameworks and Tools: React, Node.js, Spring Boot, OpenCV, Pandas, Docker, Kubernetes, AWS, GCP, tableau.

Databases and Technologies: MySQL, PostgreSQL, MongoDB, Microservices, RESTful APIs.