Rutvik Yamkanmardi

in linkedin.com/in/rayamkanmardi ✉ rutvikay@gmail.com 📞 (408) 455-5366

TECHNICAL SKILLS

Programming Languages: C, C++, Python, Java, Go, JavaScript, SQL
Backend & Frameworks:Nodejs, Expressjs, Django
Databases: MySQL, PostgreSQL, Cassandra, MongoDB
Cloud & DevOps: AWS, GCP, Lambda, Docker, Kubernetes, GitHub Actions, CI/CD, Webhooks
AI & Data Processing: TensorFlow, PyTorch, CUDA, OpenCV, Nvidia Jetson, Computer Vision, Pandas, NumPy
Robotics & Embedded Systems: ROS2, Robotics Middleware, Nvidia Jetson

EXPERIENCE

SAP UCC   March 2024 – Present
Backend Engineer (Team Lead) | NodeJS, Express, Mongo

- **Backend Overhaul:** Re-architectured the entire website backend—from database design to API endpoints—resulting in a 5x improvement in loading times by eliminating redundant data.
- **Collaborative Leadership:** Led a team of 3 in a highly collaborative environment, effectively resolving technical conflicts and aligning project deliverables.

Chico State Enterprises   June 2024 – Present
Research Scientist (Computer Vision) | Matlab, Python, OpenCV

- **3D Vision Development:** Engineered Matlab and Python solutions to extract SURF features and construct 3D point clouds from 2D video data, showcasing advanced computer vision expertise.
- **Lidar-equivalent Performance:** Achieved depth calculation performance comparable to Lidar by leveraging a single GoPro and tailored Matlab scripts for efficient object depth estimation.
- **Algorithm Experimentation:** Explored various computer vision algorithms to optimize feature extraction and enhance performance outcomes.

IndiaMart InterMESH Ltd   May 2022 – June 2023
Software Engineer | Golang, PHP, RabbitMQ, Cassandra

- **Legacy Bug Resolution:** Optimized PHP and Golang code by reworking data structures and employing efficient traversal methods to fix a 5-year-old bug that prevented customers with large product catalogs from accessing their company pages.
- **High-Volume API Management:** Developed and maintained high-volume APIs handling millions of daily requests, ensuring reliability and scalability under heavy load.
- **Database & Server Migration:** Executed strategic database and server migrations to reduce latency issues and enhance overall system responsiveness.

PROJECTS

Crosswalk Pedestrian Safety System | *OpenCV, Jeston Orin, C++, Yolo Object Detection*   May 2024
- Developed a pedestrian safety system using YOLO for object detection, optimized with CUDA for speed, achieving 90% accuracy, and deployed on a Jetson Orin board.

Multiplayer Chess Website | *Django, JS, GCP, Postgres*   October 2024
- Built a real-time multiplayer chess platform supporting 10,000 players with WebSockets, Dockerized for fast deployment, and load-balanced on GCP.

Voice-Activated Auto Navigating Robot | *ROS2, VOSK, GPT-3.5, Turtlebot, Python, Yolo*   December 2024
- Designed a ROS2-powered Turtlebot with GPT-3.5 for instruction processing, YOLO for object detection, and a wake-word system for privacy-focused activation

EDUCATION

California State University - Chico   June 2025
Master of Science in Computer Science   *GPA: 4.0/4.0*