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Experience

Triton Robotics

Jul 2025 – Present

Autonomy

San Diego, California

- Currently optimizing a Kalman Filter pipeline for robust multi-panel center estimation, integrating ROS2 for perception, ManiSkill for simulation, and FilterPy for probabilistic filtering.

Algoverse

Jul 2025 – Present

Researcher

Remote

- Conducted research on high-norm activations in Diffusion Transformers using PyTorch, analyzing activation distributions across Flux-Schnell, PixArt- σ , and other architectures.
- Implemented and performed ablation experiments to evaluate the generative and semantic impact of removing high-norm activations, confirming their negligible effect on image synthesis.

Ruangguru

Jun 2025 – Aug 2025

Software Engineering Intern

Jakarta, Indonesia

- Developed interactive animations for learning Data Structure and Algorithms using React.js and GSAP, enhancing user engagement and retention.
- Built a Node.js CLI tool that syncs animation code with voiceovers using ElevenLabs and Gemini API, automating alignment and boosting efficiency by 90%.
- Integrated Firebase for user authentication and progress tracking.

Projects

memARY: AR glasses that remember everything | Snap AR, ChromaDB, FastAPI, Lens Studio, React.js



- Engineered a real-time camera streaming system that transmits frames from Snap Spectacles to the backend through websockets, enabling continuous perception and semantic processing.
- Integrated Reka's Llama Vision Model for scene summarization and ChromaDB for vector-based memory retrieval, forming a complete cognitive pipeline.
- Won third place for the Snap Spectacles track at Calhacks 12.0, the largest collegiate hackathon.

Worme: An AI agent built to ease your work | Next.js, FastAPI, PyDantic, GeminiAPI, Firebase, Google Cloud



- Developed a full-stack AI productivity assistant that integrates with Gmail and Google Calendar APIs to automate email management and meeting scheduling, reducing task completion time to under one minute.
- Engineered an intelligent workflow optimization system using Gemini AI and PyDantic.
- Built secure Firebase authentication with encrypted token storage for Google service integrations.

Computer Vision Controlled Robot Arm | MediaPipe, RaspberryPi 5



- Developed a computer vision-based control system using MediaPipe for real-time hand and arm tracking.
- Built and programmed a robotic arm, interfaced via PCA9685 servo driver and controlled through Raspberry Pi.

Education

University of California San Diego

2025-2029

Major in Computer Engineering, Minor in Business Economics

San Diego, United States

Awards and Activities

Awards: Honorable Mention IPhO, Honorable Mention APPhO, Best Theory & Bronze Medal Indonesian National Physics Olympiad, Tencent Hackathon Winner, 3rd Place Snap Spectacles Track at Calhacks

Activities: Influencer with 150k+ followers, Data Science Student Society, IEEE, Yonder Dynamics

Technical Skills

Languages: Python, C++, C#, Java, Javascript, Typescript

Technologies: MediaPipe, TensorFlow, PyDantic, LangChain, PyTorch, Hugging Face, React.js, Next.js, Figma, Flask, Express.js, Node.js, SQL, YOLO, Scikit-learn, Supabase, Docker, Firebase, MongoDB, OpenCV, Numpy, Pandas, Matplotlib, Puppeteer, Tailwind, BeautifulSoup, RaspberryPi, Arduino, ESP32, ROS2