

ANGELA MAGTOTO

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Education

UCLA Henry Samueli School of Engineering and Applied Science

Bachelor of Electrical Engineering

May 2028

Los Angeles, CA

Work Experience

Amazon Web Services (AWS)

July 2025 – August 2025

Software Development Engineering Intern

New York, NY

- Architected **production-scale multi-agent system** with AWS Agentic protocols and frameworks to solve critical Product Manager workflow bottlenecks across all AWS teams
- Eliminated 100% of manual customer feedback analysis**, directly addressing PM pain points by saving **30+ hours weekly** previously spent on repetitive document review and insight extraction through specialized agentic workflows
- Solved latency challenges by achieving **90% query response reduction** (30s to 2-3s), enabling real-time customer insight discovery through natural language, intelligent document chunking and prompt engineering
- Addressed security concerns by building enterprise-grade **custom MCP server** with JWT Bearer authentication and OAuth per-user isolation, ensuring secure 3rd party API integration using FastMCP SDK
- Tackled PM scalability issues with Lambda-triggered RAG pipeline processing **500+ customer documents daily**, delivering **70% faster insight extraction** from previously inaccessible unstructured data
- Resolved deployment friction through containerized infrastructure with Docker and Amazon ECR, enabling **zero-downtime releases** and **75% faster provisioning** for rapid iteration cycles

Projects

Full-Stack Media Platform

React | Node.js | PostgreSQL

- Built and deployed a **full-stack web application** for social media content management, implementing React frontend, Node.js/Express backend, and PostgreSQL database
- Implemented RESTful API design, user authentication, and responsive UI/UX, achieving **5M+ page views**

AWS DeepRacer

Python | PyTorch | Reinforcement Learning

- Developed **deep neural networks** using PyTorch for computer vision-based track recognition and steering prediction to reduce track deviation
- Fine-tuned **reward function** to improve lap consistency by **75%** and achieving competitive racing performance

Lightweight Combat Robot

Python | Systems Integration | CAD

- Designed **spinner combat robot** using SolidWorks and FEA simulation, optimizing weight distribution and structural integrity for competitive robotics
- Created embedded control system with **Arduino microcontroller**, to achieve sub-50ms response time for precise maneuvering under dynamic load conditions
- Coded **adaptive PID algorithms** which maintained orientation stability during high-speed weapon operation

Leadership

Hackathon Software Development Education | *Spark & Hack the Wave*

2022 – 2025

- Organized hackathon and led **technical workshops** for **90+ students** across events, teaching full-stack web development (HTML/CSS, JavaScript, React) and version control with Git

Technical Skills

Languages: Python, Java, C++, C, JavaScript, TypeScript, Swift

Frameworks & Libraries: React, Node.js, Electron, TensorFlow, PyTorch, OpenCV, Pandas, NumPy, NLTK, spaCy

Cloud & DevOps: AWS (Lambda, API Gateway, S3, EC2, CloudWatch, Bedrock, CDK), Docker, Kubernetes, Git

Tools & Environments: VS Code, IntelliJ, Xcode, Jupyter, SolidWorks

Databases & APIs: PostgreSQL, MySQL, DynamoDB, RESTful APIs

Topics: Natural Language Processing, Reinforcement Learning, RAG Systems, Agentic AI Workflows, A2A, MCP, Prompt Engineering