

# CELINE JOHN PHILIP

+1 (530)979-6985 | celinejp.03@gmail.com | [www.linkedin.com/in/celinejohnphilip](https://www.linkedin.com/in/celinejohnphilip)

## SUMMARY

AI Engineer with hands-on experience delivering production GenAI and LLM-based solutions in real-world environments. Proven ability to own end-to-end AI workflows, translate customer requirements into scalable systems, and deploy LLM-powered applications using modern cloud and data infrastructure. Strong engineering foundation with experience collaborating across technical and non-technical stakeholders.

## EDUCATION

University of California, Davis

(Expected Graduation: 2026)

Master of Science in Computer Science (CGPA: 3.75/4)

St. Francis Institute of Technology, University of Mumbai

(2020-2024)

Bachelor of Engineering in Computer Engineering with Honors in Cybersecurity (CGPA: 8.71/10)

## PROFESSIONAL EXPERIENCE

Artificial Intelligence Intern - Civic | New York, USA

(June–August 2025)

- Owned end-to-end deployment of a production-ready RAG-based GenAI system, collaborating directly with stakeholders to translate requirements into scalable LLM workflows.
- Built and deployed LLM-powered retrieval pipelines using LangGraph, OpenAI, Pinecone, AWS OpenSearch, improving response latency by 30% and retrieval accuracy by 25%.
- Designed interactive GenAI interfaces with Next.js, NestJS, TypeScript, CopilotKit, enabling real-time execution of 13+ structured agent actions.
- Iterated rapidly based on user feedback, refining prompts, retrieval strategies, and deployment configurations for production reliability.

Software Development Intern - BusinessNext | Mumbai, India

(July–August 2024)

- Implemented data processing workflows and automation pipelines using Oracle SQL, JSON, XML, supporting enterprise-scale CRM systems.
- Collaborated with cross-functional teams to deliver data-driven insights for financial clients within a production SDLC.

Web Development Intern - Pratham Enterprises | Mumbai, India

(January–May 2024)

- Delivered a responsive production website using HTML, CSS, JavaScript, improving traffic by 20% through SEO optimization.

## RESEARCH EXPERIENCE

Speech Neuroengineering and Cybernetics Lab, UC Davis | Davis, USA

(April 2025 – Present)

*Project Name: Wrist EMG Decoding for Robust, Adaptive Human-Computer Interaction*

- Building **adaptive ML classifiers** for an HCI project in collaboration with **Meta's Ethical Neurotechnology program**.
- Analyzed dataset of 91 participants (32,000+ trials, 10 gestures) to develop **robust decoding models**.

## PROJECTS

AI-Powered Microcontroller API Assistant with Fine-Tuned LLMs

(July–September 2025)

- Fine-tuned LLMs to generate SDK-compliant embedded code (UART, SPI, GPIO, I2C).
- Built production FastAPI backend with vLLM optimizations, reducing inference latency by 60%.
- Delivered a full-stack solution using React & TypeScript, focused on real developer workflows.

BurnBright – AI Wellness Dashboard for Burnout Prediction (HackDavis 2025)

(April 2025)

- Designed AI dashboard predicting student burnout using **Canvas workload data**, Next.js, TypeScript, Flask, Cerebras-hosted **LLaMA-4 Scout LLM**, MongoDB Atlas.
- Delivered structured wellness guidance via **prompt-engineered LLM reasoning**; presented at HackDavis 2025 (MLH, UC Davis).

Adversarial Attack Detection and Defense in Neural Networks

(September–December 2024)

- Evaluated CNN **robustness** (Simple, Moderate, ResNet-18, VGG-inspired) against adversarial attacks.
- Implemented **adversarial training and gradient masking**, improving model reliability in **healthcare and autonomous systems**.

## SKILLS

- Programming Languages:** Python, Java, C++, JavaScript, TypeScript, R
- Frameworks & Development:** React, Next.js, Node.js, Django, Flutter, FastAPI, HTML, CSS, Arduino
- Data, Databases & ML:** SQL, MySQL, Oracle SQL, MongoDB, Pandas, Spark, NumPy, Pinecone
- Cloud, DevOps & Tools:** AWS, Docker, Git, GitHub, Wireshark, LaTeX, OpenAI, Triton, Gradle

## COMPLETED CERTIFICATION

- Oracle Cloud Infrastructure 2025 Certified Generative AI Professional (November 2025)
- Oracle Cloud Infrastructure 2025 Certified AI Foundations Associate (October 2025)
- McKinsey.org Forward Program (Professional Skills Certificate) (August 2025)

## TEACHING EXPERIENCE

Teaching Assistant, PHI 13G - Minds, Brains, and Computers, UC Davis | Davis, USA

(September - December 2025)

- Leading discussion sections and grading coursework on AI, cognition, and computational models of intelligence.

Teaching Assistant, ECS 170 - Introduction to Artificial Intelligence, UC Davis | Davis, USA

(September - December 2024)

- Conducted discussion sections and graded coursework on machine learning, search, and reasoning algorithms.