# Vasupradha Ramji

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**Objective:** Seeking 2026 internships in software engineering and ML/AI to build innovative, scalable solutions.

## EDUCATION

**University of Central Florida** *Orlando, FL*

*Bachelor of Science in Computer Science, Burnett Honors College* *May 2027*

- Relevant Coursework: Data Structures and Algorithms I & II, Object Oriented Programming, Algorithms for Machine Learning
- Awards: UCF's President's Honor Roll Certificate (3 semesters), Pegasus Gold Scholarship, Florida Bright Futures Medallion Scholar
- Cumulative GPA: 3.86

## TECHNICAL SKILLS

**Languages:** Java, C, Python, JavaScript, HTML/CSS, TypeScript

**Frameworks & Libraries:** React.js, Next.js, Tailwind CSS, PyTorch, TensorFlow, Scikit-Learn, Matplotlib

**Tools & Platforms:** VSCode, GitHub, Postman, Vercel, Jira, Jupyter Notebook, Bitbucket, Anypoint Studio, Splunk, AWS (Cloud Practitioner Certified), MySQL, DynamoDB, MongoDB, AutoCAD

## PROFESSIONAL EXPERIENCE

**Software Engineering Corporate Intern** *May 2025 - Aug 2025*

*Marriott Vacations Worldwide*

- Mapped dependencies across **12 core components** by compiling **3,000+ data points** using **Splunk** and **Bitbucket**, establishing the foundation for an internal analysis tool to streamline **CI/CD development**.
- Aided the **ROSA migration to AWS** by assisting with cloud deployment and coordinating between engineering and DevOps teams.
- Accelerated **Identity and Access Management, Multi-Factor Authentication,** and migration initiatives from **AWS Cognito** to **Ping** by analyzing and validating APIs with **Postman** and **Anypoint Studio** to remove blockers, authoring **8 Jira User Stories** and **accelerating project delivery within Agile sprints**.

**Undergraduate Research Assistant in Machine Learning Lab** *Nov 2024 - May 2025*

*University of Central Florida*

- Optimized a **3D Convolutional Neural Network** for **HD-sEMG gesture recognition** across **2.86 million trainable parameters**, enabling smoother and more responsive prosthetic control.
- **Reduced inference latency per batch by 51.6%** while maintaining an **F1-score over 0.95** by **refining convolutional layers**, applying **max pooling**, and **tuning hyperparameters**, effectively balancing latency–accuracy trade-offs.
- Ensured model robustness and consistency across diverse subject datasets by applying **K-fold Cross-Validation** and **pruning techniques**, strengthening generalization and reliability.

## PROJECTS

**Atticus (Your AI-Powered Legal Assistant)** *Oct 2025*

*TypeScript, HTML*

- Developed an **AI-powered legal assistant** utilizing Google's **Gemini API** to generate adaptive, context-aware responses for legal research and document composition.
- Architected **backend logic in TypeScript**, integrating **AWS Cognito authentication**, **Eleven Labs' voice bot** service, dynamic prompt routing, and secure **Gemini–Firebase data pipelines.**
- Enhanced **Gemini model performance** via prompt-engineering experiments and response-chain optimization, enhancing reasoning accuracy and consistency across queries.

**MixerAI** *Oct 2024*

*JavaScript, HTML, CSS*

- Developed a web application integrating **Spotify and OpenAI APIs** to generate optimized mixer settings for user-selected tracks.
- Led backend development by designing **API workflows** to fetch, store, and process Spotify metadata with OpenAI's generative AI.
- Earned **2nd place** in the First Time Hackers category at a **36-hour hackathon**, recognized for creativity and technical execution.

## CAMPUS AFFILIATIONS

**WiSTEM**, *Mentor* *Aug 2025 - Present*

- Mentoring 12 freshmen in computer science, providing academic guidance and career advice.

**Knight Hacks**, *Hackathon Participant* *Aug 2024 - Present*

- Competing in hackathons to build innovative projects and expand technical expertise through emerging technologies workshops.

**Knights Nakshatra**, *Dancer and Choreographer* *Sept 2023 - Present*

- Co-leading choreography for a 13-member dance team, coordinating rehearsals and delivering polished performances.