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

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** from **200+ APIs** 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 configurations and coordinating between engineering and DevOps teams, improving system reliability and smooth knowledge transfer during the migration process.
- 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**.

Software Engineering Fellow   *Jul 2024 - Sep 2024*
Headstarter AI
- Built and deployed **5 AI-driven projects** by integrating **Cloud Firebase**, **React**, and **OpenAI APIs** to craft production-ready systems.
- Implemented full-stack development best practices in scalable software design under mentorship from **Amazon**, **Splunk**, and **Google** engineers, enhancing expertise through industry-guided feedback.
- Engineered RESTful APIs with **Clerk** authentication and **Stripe** payment integration, elevating security, functionality, and user experience.

PROJECTS

Undergraduate Research in Gesture Recognition Using Deep Learning   *Nov 2025 - May 2025*
Python, Jupyter Notebook, PyTorch
- 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**, **Leave-One-Out Cross Validation**, and **pruning techniques**, strengthening generalization and reliability.

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.