

Pragyna Abhishek Titty

LinkedIn: [linkedin.com/in/abhi-titty-374109209](https://www.linkedin.com/in/abhi-titty-374109209)

Email: pragynaabhishek2013@gmail.com

Mobile: +1-352-328-0776

EDUCATION

- **University of Florida** Gainesville, FL
Master of Science in Computer Science *Aug 2024 - May 2026*
Courses: Natural Language Processing, Computer Architecture, Computational Photography
- **GITAM University** Visakhapatnam, India
Bachelor of Technology - Electronics and Communication Engineering(AI&ML) *Sept 2020 - April 2024*
Courses: Deep Learning, Microprocessors and Microcontrollers, Machine Learning for Antenna Array Analysis

SKILLS SUMMARY

- **Languages:** Python, C++, JAVA, Swift, Go, Prolog, Haskell, Gleam
- **Frameworks:** PyTorch, Scikit, NLTK, SpaCy, TensorFlow, Keras, NodeJS
- **Tools:** Jupyter Notebooks, Docker, GIT, Postgres, MySQL, MongoDB, Xcode
- **Platforms:** macOS, Web, Linux, iOS, Arduino, Raspberry, AWS, GCP

EXPERIENCE

- **University of Florida** Gainesville, FL
Teaching Assistant (Part-time) *Mar 2026 - May 2026*
 - **Course:** TA for COP5556 (Programming Language Principles) taught by Dr. Alin Dobra
 - **Office Hours:** Answering students' questions about the course
 - **Grading:** Deciding rubric and evaluating students' assignments and projects
- **University of Florida** Gainesville, FL
Graduate Assistant (Part-time) *Aug 2025 - May 2026*
 - **Lab:** I work with Dr. Navid Asadi in his SCAN Lab on hardware security problems
 - **Research:** Developing novel solutions to many hardware security problems in PCB's and Semiconductor Packages
 - **Publications:** One paper has been accepted to ECTC 2026 while other projects are getting ready to be published
- **Defence Research and Development Organisation of India** Visakhapatnam, India
Artificial Intelligence Intern (Full-time) *May 2023 - Jul 2023*
 - **Model Speedup:** Deployed distilled model on a microcontroller-class embedded device (ARM Cortex-M series), achieving 4.1x inference speedup on constrained hardware
 - **Improved Accuracy:** new model was 12.76% more accurate
 - **Smaller size:** new model was 6.02x smaller and was implemented on the embedded board

PROJECTS

- **Nova Bloom:** iOS Camera app designed to improve low-light photography in smartphones based on latest computational photography research making the most of physically limited sensors (Dec '25)
- **Graph-RAG:** Graph-based Retrieval Augmented Generation project that converts a subset of Wikipedia into a graph representation and enables LLM's to answer questions through multi-hop reasoning leveraging Metal Performance Shaders for Apple Silicon and CUDA for UF's HiperGator Supercomputer (Dec '25)
- **Reddit Simulator:** Distributed Operating Systems Principles project to build a Reddit-like simulator for thousands of users using actor model in Gleam and OTP (Dec '25)
- **Delphi Interpreter and Compiler:** Programming Language Principles course project to extend Pascal to include Delphi functionality using ANTLR and LLVM (Apr '25)
- **Vision-Enabled Responsive Assistant (VERA):** Multimodal LLM assistant that interacts with the user queries using sight and voice. Tech: Natural Language Processing, Computer Vision, RAG, Llama 2 (Jan '24)

CERTIFICATIONS

- **Deep Learning with PyTorch : Generative Adversarial Network:** Coursera
- **Visualising Filters of a CNN using TensorFlow:** Coursera
- **iOS & Swift -The Complete iOS App Development Bootcamp:** Udemy

HONORS AND AWARDS

- "The Devil in Disguise" Award for being a leader who brings out the best in everyone - GITAM University, Jun 2022
- "I Do" Award for being an individual who goes great lengths to get their voice heard - GITAM University, Jul 2021

VOLUNTEER EXPERIENCE

- **Technical Co-director, UF AI Club** Gainesville, FL
Inspiring the next wave of students to make a meaningful difference *Dec 2025 - Apr 2026*
- **Volunteer at Krishna House** Gainesville, FL
Cooking, serving food and cleaning for the non-profit *Aug 2024 - Present*
- **Vice President, AGROW GITAM** Visakhapatnam, India
Scaled the science and tech club from 4 to 48 members across five teams *Jun 2021 - Aug 2023*