

Annie Prasanna Manoharan

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SKILLS SUMMARY

Languages: C, C++, C#, Python, HTML, CSS, JavaScript | **Databases:** MySQL, Oracle, MongoDB

Tools: LabVIEW, TestStand, Git, Bitbucket, Jira, Figma | **Concepts:** Agile, SDLC, Scrum

Soft Skills: Collaboration, Ownership, Adaptability

EDUCATION

Master of Science in Computer Engineering Aug 2024 - May 2026 (Expected)
University of Arkansas, Fayetteville, AR | GPA 4.0/4.0

Bachelor of Engineering in Electronics and Communication Aug 2019 - May 2023
Sri Ramakrishna Engineering College, India | GPA 8.55/10.0

INDUSTRY EXPERIENCE

Project Engineer at *Soliton Technologies, India* June 2023 - June 2024

- Developed a C#/WPF GUI for *Dräger* to integrate test automation tools (C#, Python, LabVIEW), improving onboarding and reducing training costs.
- Sole developer on *Medtronic* project; automated ~94% of manual test cases using MAVIS for medical device testing.

Intern at *Soliton Technologies, India* July 2022 – May 2023

- Trained in OOP, LabVIEW, and TestStand. Worked with MAVIS to streamline V&V processes for medical clients.

Intern at *Pricol Engineering, India* Sep 2021 – Oct 2021

- Worked with the Research and Development team on their new project of optimizing an advanced pressure sensor which improved the efficiency in the navigation of modern aircraft systems.

Intern at *Crystal Clear Technology and Innovation, India* Jul 2020

- Trained in embedded systems using PIC16F887, covering timers, ADC, LCD, and communication protocols (UART, SPI, I2C). Built and simulated applications using MPLAB and Proteus.

RESEARCH EXPERIENCE

Research Assistant at AICV Lab, University of Arkansas

- Automated Chicken Gait Estimation**([link](#)) Sep 2024 – Feb 2025
Developed a real-time ML system using Meta's Detectron2 to detect leg diseases in chickens (in collaboration with *Cobb*). Used a dataset of 4,250 annotated images (2,646 train / 1,604 val) and the YOLO11n-Keypoint achieved AP50: 99.01% and mAP(50–95): 91.83%.
- Human Parsing Visualization for Virtual Try-On** May 2025 – Aug 2025
Built a tool to overlay and manually correct human parsing masks, improving training data quality. Leveraged GP-VTON (CVPR 2023) segmentation classes; processed 80k unlabeled and 12k labeled images.

TEACHING EXPERIENCE

- Programming Foundations (C++)** Jun 2025 – Dec 2025
Conduct lab sessions, office hours, and mentor 50+ students; create, review, and grade assignments focused on core programming fundamentals like control flow, loops, functions, arrays, and debugging.
- Database Management Systems** Jan 2025 – May 2025
Assisted in teaching a course with ~180 students by supporting course planning, content delivery, grading, and assessment development; provided guidance through office hours and discussions to clarify concepts.
- Programming (Assembly & VHDL)** Sep 2024 – Dec 2024
Instructed lab sessions for 35+ students across 3 sections, reinforcing theoretical concepts with hands-on implementation and offering technical support and debugging assistance.

ACHIEVEMENTS

- Secured the **third** place in the *LabVIEW Challenger Speed Code Contest*, 2023 at Soliton Technologies.
- Winner** of the *Greatest Ideator hapython* 2021 (C Hackathon) of R2C Technologies.

CERTIFICATIONS

- Honours Diploma in Computer Application** from *CSC (Computer Software College)*.
- Python Data Structures** an online course by *University of Michigan* through Coursera.

POSITIONS OF RESPONSIBILITY

- President, International Fellowship** (2025–26) — Led cultural and educational initiatives connecting international students with local communities.
- Core Member, Bridges International** — Fostered social engagement and support for international students.
- Deputy Fine Arts Minister, Avila Convent School** (2017–18) — Served on the school pupil leader council.