Samarjeet Purba

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SKILLS

- **Programming & ML**: Embedded C, C++, Python, Java, R, CUDA, LeRobot, Google Colab
- **Embedded Systems**: NASA Core Flight Software, Software Defined Radio, GNU
- **Cloud, Web & App Dev**: XAMPP, AWS, Azure, Android Studio, Docker, MongoDB

EDUCATION

University of Georgia, Honors, Dean's List — Athens, GA
Bachelor of Science, Computer Science (School of Computing) — August 2024 - Present

- Emphasis on Cybersecurity, Architecture, Machine Learning
- Relevant Classwork: Data Structures, Systems Programming, Theory of Computing

Athens, GA
Bachelor of Arts, Economics (Department of Economics) — August 2024 - Present

- Emphasis on Econometrics, Analytics
- Relevant Classwork: Statistics, Accounting, Macro/Microeconomics

WORK EXPERIENCE

UGA Small Satellite Research Laboratory — Athens, GA
Embedded Software Team Lead / Flight Software Lead — September 2024 - Present / May 2025 - Present

- Leading the development of 2U cube satellites for climate and aerospace research
- Working on a cube satellite for biological testing in space
- Coordinating mission testing and improving on tracking and live output from our satellites

Contractors, Closers, and Connections — Remote
Business / Data Analysis Intern — August 2023 - May 2024

- Supported general business administration tasks to improve efficiency
- Worked with data on the real estate industry and market analyses
- Helped out clients to push business relations and sales

RESEARCH

Robotic Fear Response, Intelligent Systems for Poultry Lab — May 2025 - Present

- Research on the use of machine learning based robotic systems for agricultural/poultry use
- ML based trainable system for the claw and robot built with Python, Pytorch, CUDA, LeRobot

Floor Egg Automation, Intelligent Systems for Poultry Lab — May 2025 - Present

- Research on the use of machine learning based robotic systems for agricultural/poultry use
- ML based trainable system for the claw and robot built with Python, Pytorch, CUDA, LeRobot

Research Grant for Transceiver Development, CURO — May 2025 - Present

- Research on the viability of a custom built SDR built for deployment in space
- Full stack development integrating technology such as Thonny, GNU, OBC scripts, and more

Other Research, AP Capstone — August 2022 - April 2023

- Research on foreign direct investment and the effect on West African Nations
- Research on the spread and control of invasive plants in the United States

PROJECT EXPERIENCE

UGA HacksX, *Mixed Project Development* February 2025

- Led a team to create a learning app with features like stock/monetary tracking and more
- Utilized Flutter, MongoDB, Auth0, Python to deliver a working web based application

Personal Project, Website Development February 2025

- Development of a website for business purposes, with features like a calendar, email updates, etc.
- Developed through HTML/CSS/JS alongside Apache, WordPress, Bootstrap, XAMPP

Personal Project, App Development February 2025

- 'Portal' allowing for tracking of resource use, running of Python projects, and more
- Developed through Python, Flutter, Docker, SQL

Etc. August 2022 - Present

- Projects with using storage systems, AI, data tools, and more in AWS, Azure, and GCP
- Creation of a Java/JavaFX based scientific calculator with some basic graphing capabilities
- Two platform/driving games in Unity and C++
- Certified in AZ900, Microsoft 365, clean room usage, completed AWS Cloud Practitioner, Harvard CS50, Tormach

EXTRACURRICULARS

UGA HackPack August 2025 - Present

- Member of UGA's competitive hacking and cybersecurity club
- Competing in various competitive cybersecurity events

CodeHub August 2024 - Present

- Member of UGA's full stack and general programming club
- Worked on development focused on finance and healthcare

VOLUNTEERING

Meals By Grace Suwanee, GA
General Team Member July 2022 - Present

- Supported weekly operations, helping distribute meals to over 100+ families per session
- Coordinated with sponsors and logistics teams to maintain efficiency and success

Shirdi Sai Temple of Atlanta Cumming, GA
Traffic Management Lead March 2022 - Present

- Maintained quality conditions and visitor logistics for weekly events
- Helped supervise parking and the flow of attendees for hundreds of people

Forsyth County Public Library, Main Branch Cumming, GA
Library Assistant May 2022 - August 2023

- Worked on event planning, community outreach, and more to improve visitor experience
- Dealt with database tasks such as holds, returns, and the circulation of library resources