SRINANDA KISHORE YALLAPRAGADA

| 413 409 9330 | srinanda.yallapragada@gmail.com |
| linkedin.com/in/srinanda-yallapragada/ | github.com/Srinanda-Yallapragada |

EDUCATION

University of Massachusetts – Amherst (UMass) – GPA: 3.8 / 4.0 *Amherst, MA*
Dual Degree: *Bachelors of Science – Computer Science (Honors); Bachelors of Science – Mathematics* Graduating May 2024
Coursework: Scalable Web Systems, Graduate Machine Learning, Graduate Computer Architecture (Hennessy and Patterson), Graduate Formal Language Theory (Sisper), Algorithms and Data Structures. Operating Systems, Embedded Systems.
Awards: Dean's List; Chancellor's Award – Merit Scholarship.

EXPERIENCE

Undergraduate Course Assistant | *Teaching – UMass* Sep 2023 – May 2024 | *UMass, MA*
- Maintained proactive communication with the course staff of Introduction to the C Programming Language (CS 198C).
- Conveyed student feedback to course staff and supported course documentation.
- Hosted weekly office hours and cleared 200+ student's questions about course content asynchronously using Piazza.

Peer Advisor | *Mentoring – UMass* Sep 2023 – May 2024 | *UMass, MA*
- Assisted 80+ students with semester course planning and navigating academic requirements to graduate on time.

Data Scientist | *Internship – SAP* Dec 2021 – Dec 2022 | *Boston, MA (Remote)*
- Developed a clustering model from the ground up to classify customer risk levels using the K-means unsupervised learning algorithm in Python.
- Engineered acceleration feature and identified key risk indicators by analyzing data from support ticket metrics.
- Collaborated with business stakeholders, using the clustering model to provide insights and steer business decisions.
- Implemented an MVP model effectively leveraging tools such as Jupyter Notebooks, scikit-learn, and Matplotlib.

PROJECTS

Micro Operating Systems for the Raspberry Pi 4 in C and Rust Feb 2023 – Dec 2023
C, Rust, Linux, Raspberry Pi, ARM Assembly, GPIO
- A comparative analysis between Rust and C for Bare-Metal programming for my Honors Thesis under Prof Tim Richards.
- Implemented miniUART, tiny shell, framebuffer (graphics) and interrutps.
- Used ARM GNU Toolchain and Cargo to cross-compile from x86 to ARM platform.

R3000 MIPS Simulator – Semester Long Group Project CS 535 Computer Architecture May 2023
C++, Qt–framework
- As part of a 3 person team, implemented a 32–bit MIPS inspired architecture simulator in C++ with a Qt framework GUI.
- Split instruction cache and data cache, 5 stage pipeline with data dependency stalls.
- Matrix multiply and integer sort benchmarks written in custom assembly, custom assembler.
- Branching instructions, addressing modes and timing logic with a total of 46 supported instructions.

Orderly website – Group Project for CS 320 Software Engineering May 2023
AGILE Development, Node.js, Express, Javascript, REST APIs
- Led a 6 person team to streamline virtual office hours with queues by building a website.
- Took responsibility of maintaining AGILE scrum documentation and progress tracking of the project.

Rubik's Cube Solving Robot – Group Project CS 335 How Computers Work Inside the Box Dec 2022
Arduino, Python (OpenCV), C, Stepper Motors, 3-D Printing, GPIO
- Engineered robot by utilizing 6 stepper motors, a webcam and an Arduino Nano Sense BLE 33. Executes solution in $\sim 30s$.

Button Mashing Arm Wrestling Robot – HackUMass Winning Hackathon Project Nov 2022
Arduino, Servo Motors, Passive Buzzers, GPIO, C
- Constructed Arm-Wrestling Game using Arduino Uno and Servo motors. Won Most Economical Hardware Hack.

SKILLS

Languages: Python, C / C++, Javascript, Rust, ARM Assembly.
Tools: Git, Virt–Manager, Node.js, Neovim, Docker, GNU coreutils, Linux (Arch, Debian and RHEL).
Extracurriculars: Vocal Percussion (UMass Dynamics Acapella), Speedsolving (3x3 Rubik's Cube)