Shriram Raja

M.ENG. GRADUATE · COMPUTER ENGINEERING

Virginia Tech, Blacksburg, VA 24060

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Education

Boston University, Boston, MA *Sep 2023 - present*
INCOMING PH.D. IN COMPUTER SCIENCE

Virginia Polytechnic Institute and State University, Blacksburg, VA *Aug 2021 - May 2023*
MASTER OF ENGINEERING, COMPUTER ENGINEERING *3.96/4.00*

- Advisor: Dr. Haibo Zeng
- Project Title: Hybrid Priority Assignment for Global Fixed Priority Scheduling
- Relevant Coursework: Advanced Real-Time Systems, Advanced Linux Kernel Programming, Multiprocessor Programming, Compiler Optimizations

PSG College of Technology, Coimbatore, India *Aug 2017 - May 2021*
BACHELOR OF ENGINEERING, ELECTRICAL & ELECTRONICS ENGINEERING *9.76/10.00*

- Relevant Coursework: Embedded Systems & IoT, Operating Systems, Internetworking & Applications, Digital System Design

Skills & Technologies

Programming Languages: C, C++, Python, and Verilog

Microcontrollers and Boards: Arduino, 8085, 89C52, MSP430, and Raspberry Pi

Tools: MATLAB, Linux Shell, Git, Tableau, and LLVM

Competencies: Linux Kernel Programming, Object Oriented Programming, Real-Time Operating Systems (FreeRTOS)

Soft Skills: Problem-solving, Strong Verbal & Written Communication, Leadership, Detail-oriented, and Teamwork

Professional Experience

Virginia Tech *Mar 2022 - May 2023*
RESEARCH ASSISTANT *Blacksburg, VA*

- Working on the implementation and experimentation of a Priority Assignment algorithm for Global Fixed Priority Scheduling on Multiprocessors using Response Time Estimation Range, advised by Dr. Haibo Zeng
- Contributed to the development of a novel mixed Priority Assignment algorithm that combines the advantages of heuristics and response time estimation to provide better overall performance.

Security Solutions BU, Marvell Semiconductor *May 2022 - Aug 2022*
FIRMWARE ENGINEER INTERN *Santa Clara, CA*

- Developed skills to understand and work with a large codebase spread across different repositories.
- Developed debugging skills in an embedded environment.
- Implemented the FRAM Logging feature in the latest version of LiquidSecurity Cloud Hardware Security Module to enable communication between the processor and the FRAM during boot-up.

Teaching Experience

Spring '22,
Fall '22 &
Spring '23
ECE 5480 Cybersecurity and IoT, Gradute Teaching Assistant · · · *Virginia Tech*

Extra-Curricular Activities & Honors

2021   **Best Outgoing Student**, Alumni Association, PSG College of Technology

2018 - 2019   **Academic Proficiency**, Department of Electrical and Electronics Engineering, PSG Tech
Awarded in four consecutive semesters for being among the top 3 scorers in a class of 60+ students

The Bridge - the **Official Online Magazine** of PSG College of Technology
Served as **Correspondent** and later **Editor**
Penned and edited several articles primarily on books and reading.

Institution of Electronics and Telecommunications Engineers [IETE] Students' Chapter, PSG College of Technology
Served as **Joint Secretary**
Organized several contests at the inter and intra-college level to test the participants' technical skills.