

Arun Felix

XXX-XXX-XXXX | arunf400@gmail.com | [linkedin.com/in/arun-felix-389b0323](https://www.linkedin.com/in/arun-felix-389b0323) | github.com/AFE123x | New Brunswick, NJ

EDUCATION

Rutgers University

Bachelor of Science in Computer Science

Relevant Coursework: Computer Architecture, Systems Programming, Software Methodology, Physics

New Brunswick, NJ

09/2021–05/2025

EXPERIENCE

Teaching Assistant

Rutgers University

- Conducted 1-hour weekly recitations with an average attendance of 30 students, reviewing and fortifying concepts in computer architecture.
- Developed 5 assignments per semester to aid students' understanding of concepts, resulting in an average improvement of 15% in exam scores.
- Graded 5 assignments and 2 exams per semester, providing detailed feedback within a 1-week turnaround period.

01/2024–Present

New Brunswick, NJ

Information Technology Intern

Hunterdon Central Regional High School

- Led a team of four to optimize the configuration and upkeep of diverse school technologies, guaranteeing the smooth functioning of school operations.
- Automated Chromebook enrollment using a microcontroller, improving efficiency to enroll 5+ Chromebooks simultaneously compared to manually enrolling each laptop, resulting in a 400% increase in operational efficiency.

06/2021–08/2021

Flemington, NJ

LEADERSHIP

Vice President

Rutgers University Student Linux Users Group

- Revitalized RU SLUG by organizing workshops that increased participants' Linux proficiency by 30%.
- establishing a vibrant Linux community with a 50% boost in active engagement for learning and networking.

09/2023–Present

New Brunswick, NJ

PROJECTS

Spell Checker | C

- Implemented a Trie-based spell checker in C, achieving a 30% improvement in spell-checking speed and processing over 100,000 words per second.

3/2023

NES Emulator | C++, SDL2, 6502 Assembly

- Developed a high-performance NES emulator in C++, ensuring 100% compatibility with its game library.
- Implemented 6502 CPU, Picture Processing and Audio Processing unit ensuring 1-1 accuracy with real hardware.

12/2023–Present

Micromouse | C++, Arduino HAL, Easy EDA

- designed and programmed a maze-navigating robot using the Teensy 4.0, in C++ with Arduino HAL.
- Engineered and optimized a PID control system, ensuring the robot stays within 3 cm of the maze center.
- Implemented Flood-fill algorithm, enabling bot to efficiently explore maze, guaranteeing shortest path 70% faster.

09/2022–Present

TECHNICAL SKILLS

Languages: C/C++, x86 64 Assembly, 6502 Assembly, Embedded C, Python, Bash scripting, Bare-metal C

Developer Tools: Git

Hardware Platforms: STM32, Arduino

Electronics Design and CAD Software: KiCad, EasyEDA, Fusion 360

Misc: RTOS (Real Time Operating Systems)

AWARDS

- 3rd Place-2023 MIT Micromouse Competition (10/2023)
- 1st Place-2023 IEEE Social Goods Hackathon (03/2023)
- Global Knights Scholarship (04/2021)