Prangon Ghose

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Education

Stony Brook University *Stony Brook, NY*
BACHELOR OF ENGINEERING (B.E.), COMPUTER ENGINEERING *Expected Graduation May, 2021*

- **GPA:** 3.7/4.0
- **Honors/Awards:** Dean's List (All Semesters), Presidential Scholarship, CEAS Dean's Scholarship
- **Relevant Coursework:** Data Structures, C/C++ Programming, Java and Object-oriented Programming, Embedded Systems Design with ARM and AVR Microcontrollers, Digital Systems Design using VHDL and SystemVerilog, Computer Architecture
- **Organization(s):** Stony Brook Robotics Team, IEEE-Eta Kappa Nu Honors Society - Theta Mu Chapter, Institute of Electrical and Electronics Engineers (IEEE)

Skills

Software Python, C++, C, Java, HTML, CSS, JavaScript, Bash, Git, UNIX/Linux, Assembly (MIPS and AVR), SQL
Hardware Embedded Systems (ARM and AVR), Raspberry Pi, Arduino, VHDL, SystemVerilog, Autodesk EAGLE

Professional Experience

Enertiv *New York, NY*
IOT DATA ANALYST INTERN *January, 2020 - PRESENT*

- Integrated 14 Internet-of-Things (IoT) sensors using Python, expanding Enertiv's sensor portfolio by 2x and launching 7 new IoT packages
- Spearheaded Enertiv's first-ever IoT deployment in Europe, developing documentation to install 5 IoT packages, verifying sensor data, and diagnosing installation issues
- Overhauled the sensor installation process by developing a Django and AngularJS web app, reducing installation time by 10%
- Developed the company's Linux-based smart energy meter's firmware in Python on a Raspberry Pi, capturing 4 new data types to more accurately measure energy consumption
- Designed a Python framework for capturing Modbus sensor data wirelessly, decreasing hardware costs by 15%

Science and Technology Entry Program (STEP), Stony Brook University *Stony Brook, NY*
INSTRUCTOR *January, 2019 - PRESENT*

- Launched the Program's first-ever computer science course using Python, teaching 40 high school students over 3 semesters
- Expanded the computer science course offerings by planning and teaching a 7-week object-oriented programming course, increasing the students' confidence in their skills to 85%

Projects

Wireless Controller for Easy Embedded Integration
A WIRELESS CONTROLLER WITH SERIAL INTERFACES FOR EMBEDDED APPLICATIONS

- Developed the WiFi and radio interfaces and protocols in C to optimize short-range and long-range wireless communication
- Organized the project's requirements and year-long road-map, in a team of 4, by delegating tasks, setting milestones, planning regular meetings, communicating with advisors and mitigating risks

AutoCar
AN AUTONOMOUS RACING VEHICLE

- Designed the project's systems-level architecture, collaborating with 3 team leads and 7 subsystem leads to establish priorities, deliverables, and deadlines for 30+ members

EnerGeo
A WEB APPLICATION FOR RENEWABLE ENERGY COSTS COMPARISON

- Analyzed historical weather, utility and location data from APIs in Python to measure the viability of solar and wind energy

Leadership Experience

Stony Brook Robotics Team *Stony Brook, NY*
PRESIDENT, PROJECT MANAGER, SOFTWARE TEAM LEAD *May, 2018 - May, 2020*

- Improved active member participation by 150% and recruited 45+ students across 5 sub-teams to revitalize membership
- Streamlined the team's project management across 2 projects and 9 subsystems, increasing member productivity by 25%