Prangon Ghose

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Education

Stony Brook University   *Stony Brook, NY*
BACHELOR OF ENGINEERING (B.E.), COMPUTER ENGINEERING   *August, 2017 - PRESENT*
- **Anticipated Graduation:** May, 2021
- **GPA:** 3.7/4.0
- **Organization(s):** IEEE-Eta Kappa Nu Honors Society – Theta Mu Chapter, Science and Technology Entry Program (Instructor)
- **Honors/Awards:** Dean's List (All Semesters), Presidential Scholarship, CEAS Dean's Scholarship
- **Relevant Coursework:** C/C++ Programming, Java and Object-oriented Programming, Data Structures, Embedded Microprocessor Systems Design, Digital Design using VHDL and PLDs, Computer Architecture, Modern PCB Design

Stuyvesant High School   *New York, NY*
ADVANCED REGENTS DIPLOMA WITH HONORS   *September, 2013 - June, 2017*

Skills

Programming Languages	Python, C++, C, Java, Assembly, HTML, CSS, JavaScript
Software	Git, SQL, UNIX/Linux
Hardware	Embedded Systems, VHDL, Autodesk EAGLE

Professional Experience

Enertiv   *New York, NY*
IOT DATA ANALYST   *January, 2020 - January, 2020*
- **Analyzed** the viability of seven LoRa-based Internet-of-Things sensor solutions to expand the company's product portfolio, implementing testing procedures and effectively diagnosing potential risks
- **Engineered** a decoder in JavaScript to translate LoRa data packets, increasing the ability to analyze real-time sensor data

IAB Technology Laboratory   *New York, NY*
PRODUCT DEVELOPMENT INTERN   *June, 2018 - August, 2018*
- **Reviewed** technical product documentation regarding data protection and privacy to create understandable instructions and standards for the digital advertising industry
- **Modernized** the organization's online presence by implementing search engine optimization (SEO) across its Wordpress site through the use of Google Analytics and SEO plugins

Leadership Experience

Stony Brook Robotics Team   *Stony Brook, NY*
PRESIDENT, PROJECT MANAGER, SOFTWARE TEAM LEAD   *May, 2018 - PRESENT*
- **Expanded** active member participation by 150% and recruited over 20 students across three engineering teams to revitalize competition-based project development
- **Streamlined** the team structure and communication system, accelerating each project's road-map by 20% and increasing member productivity by 10%

Projects

AutoCar
A 10:1 RATIO AUTONOMOUS GROUND VEHICLE, BUILT WITH **PYTHON** AND **C**
- **Developed** a message-passing API in Python to transmit and receive NumPy arrays, JSON objects, and other fundamental data types using the ZeroMQ framework and the publisher-subscriber pattern to communicate in between various subsystems
- **Integrated** the hardware and software systems by using the Inter-Integrated Circuit (I2C) protocol to communicate between a Jetson TX2 Embedded Computing Module and peripheral boards, reducing hardware costs by 50%

Motion-detecting Sign
A CUSTOMIZABLE LED SIGN WITH MOTION DETECTION, DESIGNED IN **EAGLE** AND DEVELOPED IN **C**
- **Designed** a two-layer printed-circuit board in Autodesk EAGLE with an on-board, re-programmable STM32L0 low-power micro-controller and a USB-based power system, streamlining the circuit and reducing hardware costs
- **Implemented** a C program on the on-board STM32L0 micro-controller to control an array of LEDs using motion sensor data