George Gao

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EDUCATION

Carnegie Mellon University
Pittsburgh, PA
Class of 2023
Bachelor of Science in
Electrical Computer Engineering & Robotics
GPA : 4.0/4.0

Coursework

Introduction to Computer Systems

Fundamentals of Programming

Principles of Imperative Computation

Introduction to Functional Programming

Electronic Devices and Analog Circuits

Introduction to Robotics

Signals and System

Technical Skills

Python

C/C++/x86 Asm

SML

Matlab

HTML/CSS/Javascript

Altium

TECHNICAL EXPERIENCE

Software Engineering Intern | STERIS | OH | *May 2021 - Present*
- Researched, presented, and implemented a One Time Password feature in C for embedded ARM devices
- Implemented international language support in C++ for in-development embedded ARM device
- Implemented a Python script to integrate multi-language strings into C++ code to easily update code base
- Wrote Python script to translate existing excel documentation into LaTeX used by the team in architecture document
- Utilized SVN, GIT, and Code collaborator to source, document, and version control code

Principles of Imperative Computation (15-122) Teaching Assistant | CMU | Remote | *Jun 2021 - Present*
- Led and taught recitation of 30+ students every week
- Held office hours three times a week to answer conceptual, code and homework questions as well as debugged code

EE/Security Intern | Buzr. | NY | *Jan 2021 – Feb 2021*
- Ran, integrated, and analyzed security penetration tests for Android, IOS, AWS environments
- Managed, created, and QAed custom Altium components

ENGINEERING PROJECT

Proxy Server | *May 2021*
- Implemented multithreaded, caching proxy server in C
- Handled HTTP GET requests

Malloc Implementation | *April 2021*
- Solution utilized implicit and doubly linked lists and segregated linked list for free nodes, and header bit metadata for dynamic memory allocation in C

Sun Sensor | *Aug 2020 – May 2021*
- Designed PCB Sun Sensor in Altium that determines the Sun's angle with 6 photodiode arrays
- Implemented SPI in C on the board
- Implemented I2C C code between two MSP430s to emulate power monitoring

Hack 112 | *Apr 2020 |* *(2nd place Award)*
- Used Natural Language Processing and web scraping to determine genres of books by analyzing text excerpts