**Madison (Max) Crookshanks**

5315 Graystone Lane mmcrookshanks@gmail.com

Houston, TX 77069

(832) 419-8038

**Objective**

I want to build a long-term career in software engineering and/or cyber security with an opportunity for career growth. I know my skills and determination can benefit any company in which I pursue a career.

**Qualifications and Skills**

* Computer Programing (github: <https://github.com/MistaMax>)
  + Full-Stack Developer
  + Languages
    - I primarily program in Java, C++, and C (1000+ hours spent on each)
    - I know SQL for database management (approx. 50 hours spent)
    - I can also program in python, Robot C, JavaScript, HTML, CSS, and PHP
  + I have experience in designing, organizing, and programming enterprise level programs
  + I also have experience in designing and creating business related databases
* Engineering and Programming Robots
  + Was the lead robotic programmer for 2 years in high school
  + My team and I won two National Robotic Olympiad competitions in Qatar as well as one National Botball competition hosted in Qatar. All these competitions resulted in my team participating in world competitions, such as the WRO, for these events
  + I primarily coded with Robot C for those competitions

**Education**

* University of Texas at San Antonio (August 2015 to Present)
  + - **Major:** Computer Science
    - **Concentration:** Software Engineering and Cyber Security
    - I am on track to complete my undergraduate degree by December 2019
    - Technical Classes Completed:
      * Systems Programming, Application Programming, Enterprise Software Engineering, Advanced Software Engineering, Object Oriented Programming, Database Systems, Secure Software Development and Analysis

**Work Experience**

* June 2017-present: Self-Employed for general computer and networking help around Houston and San Antonio
* June 2018-August2018: Stone Moves Rock Climbing Gym Employee
* May 2019-September2019: YMCA Ropes/Challenge Course Employee

**Projects**

* Enterprise Software Engineering
  + My group and I used the Agile development method to make book store software that stores and displays book information
  + This software utilizes a proxy server and a database to store and display book attributes
  + My main job was to design the software through UML diagrams and created the controllers for the user’s interface
  + I also utilized java beans to create an authentication proxy for the software we were creating
* Application Programming
  + The final project was to create an application strictly out of java’s swing library
  + We utilized multiple design principles like model view controller (MVC) to modularize the project
* Systems Programming
  + I created a Linux shell with C for my final project
  + I gained a deep understanding of multi-threaded tasks, piping, and the creation of processes
* Object Oriented Programming
  + For the final project, I programmed a messenger application with Java
  + This project utilized the observer, state, and command design principles
* Database Systems
  + For the final project, I created a healthcare database that stores medical records, makes appointments, and handles payments for a patient
  + I also created specialized SQL queries with relational calculus for the database interface
* Advanced Software Engineering
  + Created an LP Solver in C++ using the Eigen Library for the US Department of Defense
* Side Projects
  + Website Building
    - Utilized PHP, HTML, CSS and JavaScript to construct responsive and modular webpages
  + Sudoku Solver
    - Originally created it to solve a sudoku problem iteratively with java
    - I am currently creating a neural net to solve sudoku more efficiently

**Hackathons**

* Hack Rice 2018 – I worked on redesigning the TxDPS website mainly with PHP

**Tutoring**

* In my free time, I help students in Computer Science gain a deeper understanding on coding
* I am currently helping about 10 students with programming in both C and Java every week

**Charity Work**

* For about 6 years, I have volunteered as a guide for Vacation Bible School at the Saint Ignatius Catholic Church