Jason Hirsch

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EDUCATION

TEXAS A&M UNIVERSITY
Computer Science Major
Current | College Station, TX

TAMS
Computer Science Track
Graduated May 2020 | Denton, TX
GPA: 3.96 / 4.0

MARCUS HIGH SCHOOL
May 2018 | Flower Mound, TX
GPA: 3.97 / 4.0

LINKS

My Website: **jason-hirsch.github.io**
Facebook: **jason.hirsch.56**
Github: **jason-hirsch**
LinkedIn: **jason-t-hirsch**

COURSEWORK

UNDERGRADUATE
Computer Science I
Computer Science II
Computing Foundations I
Linear Algebra
Discrete Math

SKILLS

LANGUAGES
Over 5000 lines:
C++ • Python •
Over 1000 lines:
Java • C •
Familiar:
JavaScript • ASM •

TECHNICAL SKILLS
Data Structures • Algorithms •
Git • GitHub •
Visual Studio • Windows 10 •
Qt • DirectX •
Maya 3d Modeling Software •
Photoshop •
Radiant Game Engine •
Microsoft Word • Microsoft Excel •

SOFT SKILLS
Leadership • Public Speaking •
Problem Solving • Teamwork •
Attention to detail • Creativity •

PROJECTS

TETRIS AND TETRIS AI August 2020
Programmed Tetris using JavaScript and HTML. For the AI, I used a depth-first search transversal of the game board to test all possible moves, and weighed certain parameters which consitute a "good" move to decide which move is best. By using a hash set and starting the algorithm at the first non-empty row, I was able to improve performance six-fold. The project is available on my **website**.

DLL INJECTOR December 2019
Programmed a DLL (dynamic-link library) injector and designed/implemented a UI using QT to make it user-friendly. The UI has many confort features for users such as saving their settings, supporting 64bit and 32bit target executables, and providing an easy interface to customize the injection method. More details and screenshots of the UI are available on my **website**.

RESEARCH

CONNECTED AUTONOMOUS VEHICLES LAB | Undergraduate Researcher
Jan 2019 – May 2020 | Denton, TX
Worked with **Dr. Song Fu** and **Dr. Qing Yang** on connected autonomous vehicle research which involved using neural networks, a form of AI, to teach a car to drive itself. The car also connects to other vehicles in order to share data, making object detection more accurate while also enabling innovative applications of a multi-vehicle network. I specifically worked on the software that connected the vehicles together and to the edge nodes. Our research was featured by AutonomouStuff which can be seen **here**.

AWARDS

2020 Brockman Scholar - Competitive scholarship awarded to only 50 applicants
2019 Perfect Chemistry SAT Subject Test Score
2018 Perfect ACT Score
2018 UIL Calculator State Competition Qualifier
2017 Won 4th place in Computer Science at the UIL District Championship
2016 Perfect Math II SAT Subject Test score
TAMS – President's List for GPA of 4.0 in Spring/Fall 2019 and Spring 2020

VOLUNTEERING

INTELLICHOICE MATH TUTOR | Undergraduate Researcher
September 2018 – May 2020 | Denton, TX | 12 hours
IntelliChoice provides free math tutoring to underprivileged children. Volunteering through IntelliChoice has given me the opportunity to use my talent in math to help others.

ELM FORK EDUCATION CENTER LEADER | Undergraduate Researcher
March 2019 – May 2020 | Denton, TX | 30 hours
Elm Fork provides field trip opportunities to Elementary School students to learn about Environmental Science and the impact humans have on the ecosystem. I lead students during their field trips.