

Jeremiah Pitts

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EDUCATION

JAMES MARTIN HIGH SCHOOL STEM ACADEMY

GPA: 3.93/4.00

Computer Science, Engineering, Math/Science Pathway

Class of 2022

- **Relevant Coursework:** PLTW Principles of Engineering • PLTW Digital Electronics • *PLTW Aerospace Engineering • *PLTW Engineering Design and Development • *Welding I • ADV Computer Science III • *ADV Cybersecurity • AP Calculus AB • *AP Calculus BC • AP Physics I • AP Chemistry • Astronomy • *Physics C: Mechanics

SKILLS

- Software: Git, Github, Autodesk Inventor, Fusion 360 (CAD), Photoshop, GrabCad, MS Word, Excel, Pptx, Pixlr, VSCode
- Engineering: Band Saw, Mill, Drill Press, Laser Cutter, Basic CNC Router, FEA Analysis and Optimization, Design Calculators
- Computer Science: SQL Injection, Reverse Engineering, Terminals, Privilege Escalation, Data Structures & Algorithms
- Programming Languages: Java, Python, Html, CSS, JavaScript, TI-Basic, Scratch, Basic C# & PHP

EXPERIENCE:

Pico CTF (Competition)

Online

Team Founder, Team Everest

FEB 2021 – MAR 2021

- Questions involving Servers, Terminals, Html, CSS, JavaScript, Reverse Engineer, Web Exploitation, Forensics, Binary Exploitation, Cryptography, Wireshark, and other skills in competition hosted by Carnegie Mellon.

CodeFy (Organization)

Online

Fusion 360 (CAD) Director, Volunteer; Java Data Structures Helper

FEB 2021 - Now

- Drafted Curriculum for Fusion 360 (CAD); Helped High and Middle Schoolers CAD BattleBots and 2020 FRC robots; Taught Engineering Design Process, Engineering Sketches, assemblies; Helped with compareTo() method and Java classes.

Math Tutoring (Self-Employed)

Online

Advanced Geometry and Calculus AB Tutor

JAN 2021 - Now

- Tutored Freshmen and Seniors in Geometry and Calculus AB; Helped raise grades by up to 10 points; 1-3 hours per session.

HackerRank (Webpage, Competition)

Online

NGA CTF Competitor

MAY 2020 - Now

- Competed in "Capture the Flag" Cybersecurity Competitions, scored hundreds of points; Certified in Java (Basic).

CyberStart America (Competition)

Online

Cyberstart America Competitor; National Cyber Scholarship Competition Semifinalist

DEC 2019 – Now

- Forensics, Cryptography, Data Analysis, Terminal, Web Exploitation, Python and Steganography Cybersecurity Competition.

Academic University Interscholastic League (UIL Competitions)

Arlington, Texas

Mathematics, Number Sense, Calculator Application Competitor; Computer Science, Science Member

SEP 2019 - Now

- Attended camp, lectures, meetings, competitions; Took practice tests; 3rd Place Calculator Application UIL District; 2nd Place Sophomore Summer Competition; Competed in timed mental math, Science, and Computer Science competitions.

FIRST Robotics (High School Robotics Competition)

Arlington, Texas

Pneumatics Captain; CAD Captain; Design/Build Assistant Captain

JAN 2019 - Now

- Developed Physics, Calculus-based Feeder and Intake Design Calculators; Milled; Drilled; Used CNC Router; Taught Band Saw, Laser Cutter; Used Excel, MS Word; Only Designer/CAD-er for team for 2021 FRC Season.
- 2020 FIRST Regional – Quarterfinalist, Autonomous Award; Helped CAD, Build, FEA Stress Test; 2019 FRC UIL State – 2nd Overall, qualified for UIL National Competition; Regional – 1st Place Overall, Helped Build Drive Train, Actuators.

BEST Robotics Competition (High School Robotics Competition)

Arlington, Texas

Actuator Design Captain; Arm Design/Build Captain; Pneumatics Captain

MAY 2018 - Now

- CAD-ed 2 BEST robots semi-independently; Tripled Team size by recruitment; Taught VEX Robotics at Boys and Girls Club.
- 2019 BEST State Competition – UIL State 2nd Place Overall; Regional – 2nd Overall; 2018 State Competition – UIL State 2nd Place Robotics; Regional – 1st Place Overall.

PROJECTS:

SwerveBoard (Omni-directional Motorized Skateboard)

FEB 2021 - Now

- CAD-ed, built, programmed omnidirectional Skateboard with swerve module and remote controlled steering.

T-Shirt Canon Robot (Off-Season Robotics Project)

MAY 2018 – MAY 2019

- Helped CAD, build T-Shirt canon robot used in pep rallies; Used Autodesk Inventor, manual tools, and pneumatics.