

Joe Davis

Mechanical engineering student & experienced software engineer

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EDUCATION

Penn State University, — Bachelor of Science, Mechanical Engineering

September 2016- May 2019 August 2019 - Present

- Cumulative GPA: **4.0** as of June 2020
- Held position of Treasurer of the Math Club and Secretary of the Engineering Club
- Attended multiple math conferences
- Deans List

Home School, — MDHSA Diploma

September 2016- May 2019

- Completed each grade with Honors and graduated with a GPA of 3.8
- Participated in local Home School Co-op and served local VBS
- Completed several years of 3D visualization
- Earned 44 College credits in dual enrollment program
- Participated in the Community college honors society
- Took Honors College Calculus 2 in high school

EXPERIENCE

The ATS Group — Software Engineer

September 2019 - PRESENT

- Handle customer technical support calls
- Independently develop Data-driven visualization web apps using Javascript and react.
- Use Ruby to build automatic reports
- Kubernetes infrastructure experience

PROJECTS

First-Person-View Drone

- Built from scratch, did massive research to buy individual parts
- Learned opensource firmware
- Soldering electrical components
- Performed many design iterations to improve performance

Moment of Inertia Visualiser

- Used GUI to visualize the physical nature of moment of inertias
- Translated mathematical models into working code
- View Live - https://shoopapa.github.io/unit_circle_vis/

Unit Circle Visualiser

- Translated trigonometric relationships into a visual interpretation.
- Rendering of individually manipulated SVG elements.
- View Live - <https://shoopapa.github.io/Inertia-Calculator/>

SKILLS

Technical Skills

Javascript (ES6), React/Redux, HTML5, CSS3, Git, Linux, Ruby, Matlab, Blender, SolidWorks Simulations.

Other Skills

3D Animation, Artistic 3D Visualization, Technical Drawings.

Awards

- Freshman presidential award.
- Honors award during dual enrollment.

Honors

- Took 4 years of Honors Computer Graphics
- Earned 46 College credits in high school dual enrollment program.
- Dual enrolment classes - Chem 1-2, Calc 1-2, Univ physics. Among other Gen eds
- Participated in the Community college honors society
- Deans list - all semesters