# Shengran (Kevin) Jin

https://www.linkedin.com/in/kevinjin0420/

Email : kevinjin0420@gmail.com
Mobile : +1-240-756-8098


## Education

- **University of Michigan, Ann Arbor** — Ann Arbor, Michigan
  *Bachelor of Science in Computer Engineering; GPA: N/A* — *Sept. 2024 – May. 2028(Expected)*

- **Georgetown Preparatory School** — North Bethesda, Maryland
  *High School; GPA: 96/100 (Unweighted)* — *Sept. 2020 – May. 2024*

## Skills

- **Programming Languages**: Python, Java, C++, Javascript, HTML, CSS, LUA
- **Frameworks and Libraries**: Vue.js, Django, MySQL, Axios, InnoDB, Nginx
- **Tools and Platforms**: Excel, Git, Linux, Shell, LaTeX, VSCode, PyCharm, EclipseIDE, AWS, Postman, Klipper Firmware, SolidWorks, Fusion360, ROS2
- **Other Skills**: Soldering, G-code

## Experience

- **TJU Key Laboratory on Optoelectronic Information Technology** — Tianjin, China
  *Laboratory Assistant* — *August, 2023*
  - **Laser Cavities**: Studied the construction of linear and folded laser cavities and assisted in data collection from experimental procedures concerning laser efficiency and penetrative capability.
  - **OriginLab and Excel**: Utilized OriginLab and Excel to collect and compute power data from laser experiments to form graphs and statistical reports.

## Research

- **High School research paper**: Research paper on the impact of various variables such as power delivery, processing capability, cooling capability to the smooth and swift operation of a traditional Fused-Deposition Modeling 3D Printer.

- **SolidWorks SimulationXpress**: Utilized SolidWorks to assist in constructing a custom high-flow hotend for a custom VORON 0.2 3D printer, using SolidWorks SimulationXpress to simulate external forces and airflow throughout the toolhead.

## Projects

- **VORON 0.2 3D Printer**: Modified 3D printer based on open source VORON 0.2 design, including fully redesigned power delivery, mainboard wiring, auxiliary cooling, ultra high-flow hotend, hotend duct cooling system, re-tuned firmware and power-delivery parameters using Python and SPI interface.
- **FPV Drone**: Constructed an FPV drone using ordered parts, custom 3D-designed parts, and soldering. Drone capable of agile maneuvers and top speeds of 106mph. Used for high school cinema shoot and personal recreation and video production. Configured and fine-tuned video and radio signal transmission parameters using LUA.
- **Student Grade Management system**: Built a student score management system to more efficiently keep track of student grades and academic performance. Implemented Vue.js framework for frontend development, MySQL and InnoDB for database and storage. System was built to parallel the management system "Veracross" used by my high school as well as expand upon my programming experience.
- **Image Resizing Program**: Created a seam-carving algorithm to reduce PPM image size using C++, and developed extensive test-cases to ensure functionality. Utilized Version Control and implemented Documentation with Git.
- **M-Rover**: Developed frontend interface using Vue.js, Django, and Python along with the Michigan Mars Rover team, aiming to improve user-experience and reliability during competition environments.