

# Kenichi Matsuo

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## EDUCATION

### Washington University in St. Louis

*Class of 2023*

Finishing B.S. Computer Science | *McKelvey School of Engineering*

GPA: **3.65**

Finishing B.A. Applied Mathematics | *Arts & Sciences*

**Relevant Coursework:** Calculus of Several Variables, Differential Equations, Foundations for Higher Math

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## EXPERIENCE & LEADERSHIP

### National Geospatial Intelligence Agency (Department of Defense)

St. Louis, MO

Software Development Intern

*June 2021-August 2021*

- Worked on team project converting stereoscopic satellite .NTF files to VR interactive 3D map
- Replaced DoD's "DPPDB" photogrammetry algorithm with a Python script utilizing OpenCV to generate 3D point clouds, allowing users to pick two points on .NTF image and determine distance & elevation

### WashU FSAE Racing

St. Louis, MO

Brake Systems & Ergonomics Lead

*August 2020 – Present*

- Pitched new brake system for the 2022 FSAE racecar with greater brake torque and reduced weight
- Researched physics of braking, created 3D CAD models, and simulated brake rotor stress & thermals
- Analyzed combinations of components via theoretical calculation of torque to design brake system

### WashU Investment Finance

St. Louis, MO

Health Care Sector Portfolio Manager

*November 2020 – April 2021*

- Created healthcare pitch and energy sector pitch team to research and develop investment plans
- Managed sector portfolio valued over \$65,000; researched into Sempra Energy as potential investment for the energy sector and created discounted cash flow model to back up findings

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## Projects/Misc.

### Midwest Trading Competition

University of Chicago, *April 2021*

- Developed Python algorithm to trade options contract as market makers in an exchange against schools by comparing option price versus theoretical prices the algorithm derived

### University of Iowa Hackathon

University of Iowa, *April 2021*

- Used the MERN stack (MongoDB, Express, React, NodeJS) & websockets in team of 2 programmers to create a webpage allowing individuals to learn trading cryptocurrency to paper trade & display past trades
- Developed the UI/UX for the website with CSS and wrote script to from websocket cryptocurrency price data to compute portfolio values of users & log previous trades into MongoDB

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## SKILLS & INTERESTS

**Programming Languages:** Java, Python, C++, C#, AVR Assembly, OpenCV

**Interests:** Film photography, Road Tripping, Options Trading, Watch Enthusiast

[LinkedIn](#) | [GitHub](#) | [Past Trades](#)