**Kenichi Matsuo**

Ken.m@wustl.edu|+1-949-390-4749| 154 Hayward Irvine CA 92602

**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

**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

**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

**SKILLS & INTERESTS**

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

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

[**LinkedIn**](https://www.linkedin.com/in/kenichi-matsuo-2aa439173/) **|** [**GitHub**](https://github.com/kenthehacker/digitalCV) **|** [**Past Trades**](https://www.thetagang.com/dprken)