Daniel Card

U.S. Citizen   Aspiring Software Engineer

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Education

University of Michigan, College of Engineering   **Ann Arbor, MI**

Masters of Science in Engineering in Aerospace Engineering - Computation   *August 2020 - May 2021*
GPA: 3.91/4.00

Graduate Coursework: Computational Fluid Dynamics I, Computational Methods for Aerospace Engineering, Partial Differential Equations, Rocket Propulsion, Electric Propulsion, Space Policy and Management

Accolades: Graduate Student Instructor

Bachelors of Science in Engineering in Aerospace Engineering   *September 2018 - August 2020*
GPA: 3.91/4.00

Undergraduate Coursework: Gas Dynamics, Aerospace Propulsion, Aerospace Structures, Aerodynamics, Vibration and Dynamics, Spacecraft Dynamics, Electrical Circuits Analysis, Space Mission Design, Aerospace Controls

Awards and Accolades: Summa Cum Laude, Dean's List, University Honors, 1st Generation Engineer, 1st Generation STEM

Experience

Northrop Grumman Corporation   **Clearfield, UT**

Tooling and Mechanical Design Engineer   *June 2021 - Current*

○ Lead Engineer for maintaining the Navy's multi-billion dollar contract to manufacture the Trident II D5 Ballistic Missile, entailing being on-call 24/7 and to support on-site operations throughout the weekend/and or nights

○ Determine root causes on tool defects and its impacts on product and discuss top-level engineering with customers (Army, Lockheed Martin, Navy) our proposed fixes to provide transparency and dependable products

○ Provide excruciating attention to detail to mitigate manufacturing defects on end-product valued on the order of tens of millions of dollars for national defense

○ Reduce the risks of manufacturing stoppage, identify manufacturing bottlenecks, safety concerns, and support floor operations and personal

Personal Projects

Non-Fungible Token (NFT) Blockchain Project

Python Engineer   *October 2021 - Current*

○ Implemented Python script to generate 7,777 unique 1/1 artwork pieces with weighted distributions reflecting rarity to be minted as Non-Fungible Tokens (NFTs) centered around a charitable cause

○ Generated personalized .json metadata and uploaded to an ICPS, a de-centralized database, for implementation with the blockchain smart contract for the artwork

○ To give public transparency, all transactions to charities will be logged via the Blockchain ledger to ensure public trust

Github Repository: google-maps-tourist

Full-Stack Engineer   *January 2021 - Current*

○ Integrated backend with google-maps API to sort and parse highly rated locations to generate an ideal local route

○ Created a Flask backend, React frontend application to automatically create routes given start/end locations and exports the ideal tourist route to an html file that is dynamically loaded into the React app

○ Future implementation to integrate Github pages for online deployment of the website for a more immersive UX experience

○ After initial Github pages deployment and confirmed functionality, plans to expand options to allow user to customize searches based on their own personal preferences rather than top-rated locations

Skills

○ **Coding Languages**: Python, React, HTML, Matlab, C++, CSS, Javascript, Django, and Arduino

○ **Misc Software:** Github, Linux, SQL lite, pip, npm, node

○ **General**: Microsoft Office, Word, PowerPoint, and Excel, Adobe, LaTeX,

○ **Soft Skills:** Honest, Hard Worker, Fast Learner, Attentive to Detail, Dependable, Easy Going

○ **Interests:** Artificial Intelligence, Machine Learning, Python, Game Design, DevOps, back-end algorithms

○ **University of Michigan** | **Coursera Specializations:** Python for Everybody, Python Data Science, Python Django