Daniel Card

U.S. Citizen | Aspiring Software Engineer

Cell: (810) 728-6754 | Email: dcard@umich.edu | linkedin.com/in/dan-card | http://www-personal.umich.edu/~dcard/home.html

Education

University of Michigan, College of Engineering
Ann Arbor, MI

Masters of Science in Engineering in Aerospace Engineering - Space Propulsion *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: 3.93/4.00

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
- Scripted image generation, created an SQL database to increase efficiency and ensured no duplicate artworks would arise
- Generated personalized .json metadata and uploaded to an ICPS, a de-centralized database, for implementation with the blockchain smart contract for the artwork
- Raised over $XXX,XXX for charity in the Q1 2022 launch week, with full transparency certified via the Blockchain ledger

Non-Fungible Token (NFT) Meme Generator
Lead UX and Front-end Engineer *December 2021 - Current*

- Using React.js created a dynamic single-page HTML website that connects with web3 wallets and loads a genesis piece as a meme template
- Created the front-end UX experience to pick an image filter, top/bottom text and and interfaced with a back-end API to generate the *meme* preview before minting the NFT via a Polygon smart-contract that donates proceeds to charity

Skills

- **Coding Languages**: Python, React.js, HTML, Matlab, C++, Mathematica, and Arduino
- **Misc Software:** Github, Linux, SQL lite, pip
- **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
- **Coursera Certifications:** Applied Machine Learning in Python, Applied Plotting Charting & Data Representation in Python, Applied Social Network Analysis in Python, Applied Text Mining in Python, Building Web Applications in Django, Introduction to Data Science in Python, Programming for Everybody (Getting Started with Python), Python Data Structures, Using Databases with Python, Using Python to Access Web Data, Web Application Technologies and Django