Jaden Durnford

jadendurnford@gmail.com · (647) 537 8481 · github.com/jadendurnford · linkedin.com/in/jadendurnford

EDUCATION

University of Waterloo

BASc. Mechanical Engineering

Waterloo, ON September 2020 - Present

 Relevant coursework: ME203: Ordinary Differential Equations, ME212: Dynamics, ME220: Mechanics of Deformable Solids 2, ME250: Thermodynamics 1, ME262: Introduction to Microprocessors and Digital Logic.

WORK EXPERIENCE

Healthcare Systems R&A Inc.

Waterloo, ON

Engineering Research Assistant

September 2021 - December 2021

- Assisted in building an automated and universal Smartphone Rapid Diagnostic Test reader.
- Enhanced Python calibration code to improve prediction accuracy of various concentrations.
- Implemented various image manipulation functions to refine the quality of test images.

Taymer International Inc.

Markham, ON

Mechanical Design Engineer Intern

February 2021 - May 2021

- Worked across complete product life-cycle: design, fabrication, assembly, and quality assurance.
- Individually designed new LR400 Accurate Wire Length Counter product suite in OnShape.
- Optimized LR600 cutter module (via interchangeable funnels) to increase compatible wire sizes.
- Designed a camera box module for the HF3000 hot foil marking machine to enable print observation.

QBuild Software

Markham, ON

Application Developer Intern

January 2021 - February 2021

- Built a HIPAA-compliant health dashboard using a headless WordPress CMS in JavaScript.
- Designed and developed a custom WordPress plugin in PHP to search and filter the PubMed API.
- Built misc. internal dashboards to monitor processes via JavaScript (React), HTML, and CSS.

Projects

Habipets - ETH Toronto Hackathon [Semi-Finalist, AlturaNFT Bounty 2nd Place | React, Solidity

• Developed a web application allowing users to log daily habits with the incentive of a smart NFT dynamically updating as the habit is reinforced.

Snip3r - ETH NYC Hackathon NextJS, SQL

• Developed a web application allowing users to input price, rarity, and trait values for NFT collections to snipe listed NFTs matching their query.

${\bf Twitter\ Follow\ Tracker}\ {\it JavaScript},\ {\it SQL}$

• Developed a JavaScript program which stores account following data from the Twitter API using SQL, and sends updates via a Discord bot

NFT Rarity Tool JavaScript

• Developed a JavaScript program which pulls NFT trait data to sort collections by rarity score.

WeightWeave Gitcoin Bounty React

• Developed a simple web application allowing users to track their weight and save it to the permaweb.

SKILLS

Programming Languages: Python, JavaScript, C++, HTML/CSS, MATLAB

Tools and Technologies: AutoCAD, SolidWorks, React, NextJS, Microsoft Office, Adobe Illustrator Certifications: MITx Computational Python, National Lifeguard, SFA/CPR-C, CANSail 4