# Matthew Collins

# Systems Design Engineering





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### Skills

### Roadmapping **Technical Writing Brainstorming** Collaboration

Sketch/Figma **UX** Research Amplitude Coding

### **Awards**

SHAD Fellow 2018 **Robotics Worlds Semi-Finalists** DECA Provincials top 10 Awards CO<sup>2</sup> Car Design Winner **OHF Hockey Provincial Finalist** 

### **Education**

**Systems Design Engineering** University of Waterloo '24

Motorola Engineering Scholarship UW President's Scholarship

#### **Relevant Courses**

Human Factors in Design **Design Process & Prototyping** Systems Modelling Data Structures and Algorithms CAD Graphics Lab (SolidWorks)

# Interests

Interior Design Music **Computer Vision** Electric Guitar **Podcasts** Kayaking Running Hockey

## **Experience**

### **Product Manager**

**Moves Financial** 

Jan 2022 - Apr 2022

Carried epics from inception to fruition using methods adapted from Basecamp's 'Shape Up' approach. Wrote product requirement documents, managed team projects and actively contributed to product strategy for the Fintech banking app.

Led a series of user interview rounds to develop a deep understanding of gig-worker's priorities. Performed analysis to deliver key insights and effectively improve the user experience.

#### **Product Designer**

16 Bit Inc.

Jul 2021 - Sep 2021

Collaborated with a team of Radiologists to create 'Rho', an Al powered SaMD tool to detect Osteoporosis. Led product team meetings, prototyped high-fidelity UI mock-ups in Figma and conducted UX research to design the Radiology system.

### **Product Developer**

Altium

Sep 2020 - Dec 2020

Built AI object detection systems on lightweight PCBs using Python, OpenCV and TensorFlow YOLOv4. Applied cutting edge computer vision principles to optimize system detection speeds and accuracy.

#### Solutions Developer (Full-Stack + UX/UI)

**Jasper PIM** 

Jan 2020 - Apr 2020

Managed rapid prototyping of an E-commerce app, presenting final UI designs to clients. Developed Full-Stack code for a Shopify web app using the MVC architecture.

# **Projects**

matthewc.ca - нтмL, css, Js

May 2022

Created a terminal-style personal website using CSS, HTML and JS.

### **SHAD Final Design Project**

Jul 2018

Designed a vehicle mounted LIDAR ice detection system and data network to reduce costs of salt-based road de-icing.

#### Coin Collector - Python

Jan 2018

Developed a one player retro arcade-style game using Pygame.