# MADELINE C. BUSSE

Email | Phone | LinkedIn | GitHub | Personal Website

#### **ABOUT ME**

Entry-level software engineer with a background in full-stack development, user-centered design, and data-driven strategy. Experienced on cross-functional teams in marketing tech, robotics, and academic research. Inclusive leader with a track record in startups, community leadership, and customer service. MIT Sloan deferred MBA admit with long-term goals in product innovation and ethical technology design.

## **EDUCATION**

## The University of Chicago | Chicago, IL

2021-2025

Bachelor of Arts, Double Major in Computer Science and Philosophy.

- GPA: 3.676/4.000 | National Merit Scholar.
- Relevant Coursework: Programming Languages, Data Science, Security & Privacy, Robotics, HCI.

# MIT Sloan School of Management | Cambridge, MA

Expected 2030

Deferred MBA Admit, Early Admission Program.

# AI Ethics Seminar at Duke University | Durham, NC

June 2024

- Sole undergraduate invited to participate in selective cohort of graduate students and technical professionals.
- Discussed philosophical and technical texts on AI with an emphasis on ethical system design and real-world impact.

#### **EXPERIENCE**

## **PMG,** Software Engineer | Dallas, TX

June 2025-present

- Designed and implemented a Python-based data pipeline to harvest trends across TikTok and Pinterest APIs, visualized using Looker Studio dashboards to inform client marketing strategies.
- Built a full-stack brand health diagnostic system using React, automating optimization recommendations across product, marketing, and UX.

## **Zenblen,** Front-End Software Engineer Intern | Chicago, IL

July 2024–September 2024

- Designed, prototyped, and implemented UX/UI elements for a robotic smoothie kiosk to address data-driven customer needs and develop brand identity across the kiosk, website, and social media.
- Spearheaded alignment of company goals to marketing efforts such as a loyalty program, collaborating with CEO and marketing team in an entrepreneurial, start-up environment.

## Human Robot Interaction Lab, Research Intern | Chicago, IL

June 2023–August 2023

- Conducted a study on 150+ human participants, working with a team of two researchers to integrate a humanoid robot with ChatGPT and collect data on 20+ statistics per participant.
- Automated collection and statistical analysis of multimodal interaction data using Python, R, and cloud-based storage pipelines.

## ADDITIONAL EXPERIENCE AND COMMUNITY INVOLVEMENT

#### Harper Café, Barista

March 2022-May 2025

- Handled customer interactions and ensured high-quality beverage preparation at a busy on-campus café.
- Served 50+ customers during rush hours and performed end-of-day cash balancing and equipment maintenance.

#### By the Hand Club for Kids, Volunteer

November 2023-May 2025

- Oversaw and tutored an afterschool classroom of 20+ elementary school students once a month.
- Fundraised \$2,000 through personal outreach as a member of the 2024 Chicago Marathon Team.

#### **LEADERSHIP**

## University Ministry of Christ Church Chicago, Co-President

May 2022–May 2025

- Managed \$20,000 annual budget and led strategic planning for 50+ member campus ministry.
- Headed a team of six board members in organizing and hosting 20+ campuswide social service events annually.

# Phoenix Outdoor Program, Trip Leader

September 2023-September 2024

• Trained and mentored 18+ students in outdoor leadership and safety, combining logistical planning with real-time problem solving in backcountry environments.

## SKILLS AND CERTIFICATIONS

Technical: Python, Flutter/Dart, R, C, React, HTML/CSS, AWS (in progress), Git, SQL.

Certifications: Bloomberg Market Concepts (November 2022), AWS Developer Associate (expected 2025).