

Arnuv Peri

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Education

University of Michigan, Ann Arbor

Expected May 2025

Multiple Dependent Degree Program, Engineering and Business Administration

GPA: 3.7

Bachelor of Science Engineering in Computer Science

College of Engineering

Bachelor of Business Administration

Ross School of Business

Coursework: Data Structures & Algorithms I/II, Computer Organization, Foundations of Computer Science, Operating Systems, Computer Vision & Machine Learning, Web Systems, User Interface Development, Human-Centered Software Engineering, Artificial Intelligence for Business [May 2025]

Activities: Michigan Concrete Canoe Team [Webmaster & Business Lead], NOBE at Michigan [VP of Consulting]

International Programs in Engineering: Paris, France

May 2023 – July 2023

Experience

CSE Instructional Aide, University of Michigan College of Engineering – Ann Arbor, MI August 2024 – Present

- Collaborates with staff of EECS 482 (Operating Systems) to teach course material for over 300 students.
- Hosts one-on-one office hours to teach students concepts in multi-threaded C++ programs and data structures.
- Mentors 20 students to increase comprehension regarding thread libraries, pagers, file systems, and networks.

Software Engineering Intern, National Instruments – Austin, TX

May 2022 – August 2022

- Led global development of an automated test suite, boosting coverage for 150+ LabView drivers.
- Integrated virtualization through Agile development to run Python tests, reducing resource usage by 50%.
- Configured tests to run in the Azure DevOps pipeline at each pull request, improving build times by six hours.

CS Research Assistant, University of Michigan Medical School – Ann Arbor, MI

May 2022 – January 2023

- Investigated positive effects of ketamine on 250 zebrafish using a MATLAB calcium imaging library (CIAtah).
- Extracted cell activity from 12 terabytes of footage through autonomous visual processing algorithms.

Projects

Michigan Concrete Canoe Team Website

concretecanoe.engin.umich.edu

- Built and maintained a responsive team website using Next.js and PostgreSQL database to attract sponsors.
- Integrated Meta's Instagram API to create a social media wall, dynamically displaying the 10 most recent posts.

GratiTap

gratitap.vercel.app

- Developed a gratitude logging app using Next.js, enabling over 100 users to log moments they are grateful for.
- Achieved an 89% increase in reported happiness among users and over 1,000 gratitude events logged to date.

EageReader

eagereader.vercel.app

- Built a Next.js web app to gamify leisure reading and encourage consistent reading habits among youth users.
- Implemented friend connections, leader boards, and reading tracking using Drizzle ORM to boost retention.
- Developed a book recommendation algorithm to broaden reading horizons and foster sustainable interest.

Barbell Object Detection

- Implemented a training pipeline on 2800+ barbell images, achieving accurate tracking across video frames.
- Leveraged machine learning techniques and a Mask Region-based Convolutional Neural Network with two layers to train the model, ensuring robust barbell identification and tracking in diverse workout scenarios.

Skills

Languages: C/C++, Python, Java, JavaScript, TypeScript, HTML/CSS, Swift, Julia, MATLAB

Technologies: Next.js, React.js, Flask, PyTorch, NumPy, Git, Android Studio, SQL, Azure DevOps, OpenCV