

Paul-Andrei Aldea

paldea@umich.edu ❖ (202) 468-8793 ❖ github.com/paulxro ❖ linkedin.com/in/paldea

WORK EXPERIENCE

Teaching Assistant (Graduate & Undergraduate)

Aug. 2023 – May 2025

University of Michigan Ann-Arbor

Ann Arbor, MI

- Led lab sections of 30+ students, delivering lectures, coding demos, and guided assignments.
- Taught C and C++ design principles, debugging strategies, and low-level architecture concepts.
- Collaborated with faculty to improve assignment clarity and grading efficiency.

Junior Software Developer

Mar. 2020 – Jan. 2021

NOVA Web Development

Arlington, VA

- Built responsive front-end features using HTML, CSS, JavaScript, improving user engagement.
- Developed back-end logic in Django with MongoDB, integrating APIs and data pipelines.
- Automated testing with Pytest & Cypress, mitigating regression issues.

EDUCATION

University of Michigan Ann-Arbor

May, 2025

Master of Science in Computer Science

Ann-Arbor, MI

- **GPA:** 3.8/4.0
- Relevant Coursework: Advanced Operating Systems (C++), Advanced Scalable Systems for Gen AI (PY), Advanced Computer Security (C#), Advanced Computer Organization (C), Design and Analysis of Algorithms

University of Michigan Ann-Arbor

May, 2024

Bachelor of Science in Computer Science

Ann-Arbor, MI

- **GPA:** 3.9/4.0 | **Honors:** William J. Branstrom Freshman Prize, University Honors w/ Distinction
- Relevant Coursework: Operating Systems (C++), **Web Systems (PY)**, Computer Security (C), Computer Organization (C), Data Structures and Algorithms (C++), **UI/UX Design (JS)**

PERSONAL PROJECTS

Banking Web Application

Aug, 2022

- Built ReactJS front-end with Python REST API to simulate core banking workflows.
- Secured sessions with JWT authentication and stored user data in a distributed MongoDB cluster.

Stock-Trading Desktop Application

Jun, 2022

- Developed an Electron desktop app to fetch stock data and analyze trading risk with statistical models.
- Integrated a Flask REST API for user and stock data and added TOTP-based MFA.

Chess Visual Helper

Dec 2023

- Designed TypeScript Chrome Extension to help visually-impaired users play on chess.com.
- Captured audio input and mapped moves to a digital board; automated testing with Cypress.

SKILLS

Languages: JavaScript, TypeScript, Python, HTML, CSS, C++

Frameworks & Libraries: ReactJS, Vue.js, Express, Flask, Django, Cypress, Pytest

Databases & Cloud: MongoDB, PostgreSQL, AWS EC2, Route 53

Other: GitHub, GitLab, Jinja2, Microsoft Office Suite

Operating Systems: Linux (Ubuntu), MacOS, Windows