# **Caroline Schafer**

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### **Education**

Case Western Reserve University, BS Computer Science @

Aug 2021 - May 2025 | Cleveland, Ohio

GPA: 3.7, Dean's High Honors

Coursework: Full Stack Web Development, Machine Learning, Natural Language Processing, Artificial Intelligence, Software Engineering, Algorithms, Data Structures, Database Systems, Data Analysis, Discrete Math, Statistics, Operating Systems

P Skills

React | Java | Python | Machine Learning | SQL | API Development | Spring Boot | Next.js | Django | PHP

## Professional Experience

Software Engineer, PMG ∅

Jun 2025 - Present | Dallas, Texas

Contribute to Alli Creative Insights, used by global brands including Nike, Apple, and Beats, building scalable backend systems to analyze creative performance and provide actionable insights. Implement Al-driven analysis in client-facing tools, accelerating creative evaluation and informing hundreds of campaign decisions.

**Software Engineering Intern**, Publicis Sapient @

Jun 2024 - Aug 2024 | New York City

Collaborated with a cross-functional team to build a full-stack advertisement management system for a grocery client using Spring WebFlux, MongoDB, and React, supporting campaign management across 100+ stores in North America. Enabled regional managers to create, manage, and deploy campaigns and implemented collaborative and content-based filtering to provide actionable insights on campaign performance by location, season, and other metrics.

Research Assistant, Vivek Nallur, University College Dublin @

Jun 2023 - Jul 2023 | Dublin, Ireland

Conducted an individual research project on AI and robotics in eldercare, analyzing ethical considerations, research gaps, and potential benefits. Authored a comprehensive paper and created a poster, presenting findings and recommendations to advance discourse on technology, ethics, and eldercare.

### Projects

## TikTok + Pinterest Keyword Analysis Dashboard, PMG

Jun 2025 - Jul 2025

Built an automated data pipeline integrating TikTok and Pinterest APIs to track emerging keywords and hashtags. Developed a real-time Looker Studio dashboard using ML similarity scoring to surface relevant and competitor-aligned keywords, helping the team streamline content research and make data-driven marketing decisions.

**Acousticare**, HyperCase at Case Western Reserve University *&* 

Dec 2024 - May 2025

Collaborated in an interdisciplinary team to build a healthcare mobile app aimed at helping physicians treat patients with Dysphonia by collecting voice samples and patient-reported outcomes. Contributed across the stack (React Native, Django, Postgres), developing key features including authentication, digital consent workflows, dynamic surveys, voice recording and audio metric extraction, survey customization/scheduling, and secure data export.

TerraBite: Zero-Waste Meal Planning Application, Project Manager

Aug 2024 - Dec 2024

Developed a full-stack application with Django, React, and PostgreSQL to reduce food waste by helping users manage pantry inventory, plan meals, and generate grocery lists. Led project management, coordinating tasks, timelines, and feature prioritization, while also contributing to backend development, frontend implementation, and UI prototyping in Figma. Implemented Al-powered recipe suggestions along with meal planning and pantry tracking functionality.

#### ♦‡ Leadership Experience

#### Teaching Assistant — Algorithms, Intro to Java,

Aug 2022 - Jan 2025

Case Western Reserve University

Assisted 200+ students in weekly recitations by teaching core algorithmic concepts (greedy, divide and conquer, dynamic programming, graph algorithms), guiding coding labs and Java projects, and grading assignments.

**Girls Who Code**, Facilitator

Jan 2022 - May 2025

Taught girls ages 8 to 18 how to program in Python during weekly classes. Developed curriculum and weekly worksheets for students. Facilitated classes and coached students in problem-solving and project building.

Case Western Footlighters, Choreographer

May 2023 - May 2025