Owen Kobasz

267-337-1850 | owenkobasz@gmail.com | linkedin.com/in/owen-kobasz

My work blends critical thinking skills with technical proficiency, building applications that integrate AI and machine learning. I thrive in teams that value communication, mission, and thoughtful design as much as technical rigor. I bring a humanities-informed perspective to software engineering, shaped by years of managing projects.

EDUCATION

University of Pennsylvania: School of Engineering 2023 – 2025 Philadelphia, PA
Master of Computer and Information Technology – Computer Science
Selected Coursework: Artificial Intelligence, Database and Info Sys., Natural Language Processing.

St. John's College 2014 – 2018 | Santa Fe, NM
Bachelor of Arts in Liberal Arts

TECHNICAL SKILLS

Languages: Python, Java, SQL, C/C++, JavaScript, TypeScript, HTML/CSS, LaTeX
Frameworks: React, Node.js, Django, Flask, WordPress, Material UI, Tailwind CSS, PostgreSQL
Developer Tools: Git/Github, Docker, DBeaver, JetBrains, VS Code, Linux
Libraries: Pandas, NumPy, Matplotlib, Scikit-learn, PyTorch, Seaborn, Plotly, PySpark

SELECTED PROJECTS

Cyclone: Bike Route Generator | *React, FastAPI, Node.js, SQLite* 2025
- Interactive React/Vite front end (Tailwind, react-leaflet) visualizing custom A* routes on OpenStreetMap.
- FastAPI/Uvicorn backend leveraging OSMnx, NetworkX & GeoPandas for high-performance graph routing.
- GPT-powered waypoint generation via OpenAI Python SDK, chained into GraphHopper Directions API paths
- Express & SQLite auth/API service & full-stack containerization with Docker Compose.

Turbo: Auto Market Insights | *AWS, React, Node.js, PostgreSQL, Python* 2025
- Full-stack web application designed to help consumers and dealers on their car buying journey.
- Developed with a React front end and Node.js backend with PostgreSQL using DevOps, hosted on AWS.
- Scraped data from Craigslist to power search, filtering, value comparisons, and regional market insights.

Tweet Analyzer | *Java, Git* 2024
- Created an N-tier architecture program for importing and analyzing tweets from CSV and JSON files.
- Executed data analysis to identify and report the number of flu-related tweets per state, demonstrating proficiency in data handling and console-based reporting.

Assembler/Disassembler | *C, Linux, GDB, Valgrind* 2024
- Programmed a computer assembler using C to read and process binary files then store the binary data into a human-readable format as a linked list. Used debugging tools, including GDB and Valgrind.

EXPERIENCE

Editor & Marketing Lead | *photo-eye Books and Projects* 2018 – 2025 | Santa Fe, NM
- Marketing lead for the largest specialty photobook store, increasing brand visibility & engagement.
- Maintained and enhanced a React-based front end within an MVC architecture.
- Grew social media audience from 18k to 65k+ while launching targeted campaigns and integrating e-commerce.

Gallery Director & Head of Member Exhibits | *PhotoLounge* 2021 – 2023 | Philadelphia, PA
- Founded and directed a new gallery program, overseeing all operations, curation, and strategic planning.
- Project management for 20+ exhibitions including: curation, marketing, install, and community engagement.

VOLUNTEER WORK

Neighborhood Bike Works | *Mechanic* 2022 – Present | Philadelphia, PA
- Assist community members in repairing and maintaining their bikes, supporting affordable transport access.

Philly Bike Action | *Tech Team* 2023 – Present | Philadelphia, PA
- Build and maintain web tools in Django to support bike advocacy and ride coordination.