
PETER MARSH

EDUCATION

M.S. BIOMEDICAL ENGINEERING – DATA SCIENCE & SOFTWARE DESIGN CONC. (2026)

Northwestern University - McCormick School of Engineering

B.S. BIOMEDICAL ENGINEERING – COMPUTER SCIENCE MINOR (2023)

University of California, Los Angeles (UCLA) – Samueli School of Engineering

PROFESSIONAL EXPERIENCE

AI SOFTWARE & PRODUCT ENGINEER

APRIL 2026 – PRESENT

THE POCKET PROTECTOR

CHICAGO, IL

- ❖ Shipped features across a consumer Medicare Advantage plan-comparison platform – React/TypeScript frontend, Node.js API, PostgreSQL on Google Cloud Platform (Cloud Run, Cloud SQL) – currently driving millions in revenue each year.
- ❖ Responsible for *design and implementation of the core MA plan-recommendation algorithm* – out-of-pocket drug-cost projections, benefit tradeoff flagging, plan ranking by referral and prior-authorization burden – on data pipelines built loading CMS benefit, formulary, and star-rating datasets into PostgreSQL.
- ❖ Built doctor, facility, and pharmacy search over the national NPI provider registry (millions of records), ingesting insurer network data from FHIR Plan-Net APIs and building PDF-extraction pipelines for carriers that publish no API.

FULL-STACK SOFTWARE ENGINEER

JUNE 2025 – SEPT 2025

COTIVE.AI

REDMOND, WA

- ❖ Led end-to-end development of an AI-based educational platform at an early-stage startup, owning features from backend system design through UI in TypeScript, React, Next.js, and SQL.
- ❖ Tuned and evaluated LLMs powering K-12 tutoring across history, math, science, and art subjects.

SOFTWARE ENGINEERING INTERN

JUNE 2024 – MARCH 2025

LINKTBOOK.COM

SEATTLE, WA

- ❖ Built automated data-extraction pipelines in Python and TypeScript on AWS (Lambda, S3), applying machine-learning image recognition to pull structured data from 10,000+ customer invoices + expense receipts/mo. Intake flow to handles both in-app uploads and email-forwarded documents, eliminating manual data entry.

CLINICAL RESEARCH DATA SPECIALIST I

NOV 2022 – JUNE 2024

CEDARS-SINAI HOSPITAL – BIOMEDICAL IMAGING RESEARCH INSTITUTE

LOS ANGELES, CA

- ❖ Developed deep-learning computer-vision models (PyTorch) to segment and analyze CT, MRI, and retinal images for disease-risk assessment on a U.S. Department of Defense-funded research program.
- ❖ Built segmentation models exceeding 90% Dice-Sørensen coefficient (DSC) and carcinoma detection/classification models exceeding 95% AUC.

SKILLS • PROJECTS • CERTIFICATIONS

TypeScript, JavaScript, Python, SQL, C++, React, Next.js, Node.js, React Native, PostgreSQL, Google Cloud Platform (GCP: Cloud Run, Cloud SQL), AWS (Lambda, S3), PyTorch, TensorFlow/Keras, scikit-learn, OpenCV, REST APIs, CI/CD, LLM design, tuning & evaluation.

- ❖ Bardlore – machine-learning-driven Dungeons & Dragons digital DM – subscription service at bardlore.com
- ❖ AWS Certified Cloud Practitioner
- ❖ Personal website designed and deployed at peterbmarsh.com