

Experience

CMU Penrose Group - Researcher

Fall 2018 - Present | Pittsburgh | penrose.ink

Defining the end-user experience for the Penrose project, which renders abstract mathematical concepts with intuitive visualizations.

Flexibits - Software Engineering Intern

Summer - Winter 2018 | Remote | flexibits.com

Developed and deployed scalable services to users of Fantastical, an award-winning, top-ranked iOS and Mac app.

MIT CoCoSci Group - Researcher

Summer - Fall 2017 | Cambridge | cocosci.mit.edu

Conducted original research on program synthesis using techniques derived from human-inspired cognitive science and machine learning.

Formlabs - Web Engineering Intern

Summer 2017 | Somerville | formlabs.com

Developed and designed internal and user-facing projects for the global 3D printing market.

Projects

Semantic Calculator

Launched August 2018 | semantic.a9.io

A tool for exploring how word embeddings relate to each other through an interactive REPL interface. Experimented with interfaces that facilitate understanding of machine learning models.

LiquidTime

Launched October 2016 | liquidti.me

A time management and planning app to help fight procrastination. Featured on the front page of Hacker News and Product Hunt and has logged hundreds of hours of users' productivity every month.

Education

Carnegie Mellon University

2018 - 2022 (expected)

BSc. Cognitive Science

Dean's List with High Honors.

Selected Courses

Principles of Imperative Computation

Principles of Functional Programming

Concepts of Mathematics

Matrices and Linear Transformations

Interpretable Machine Learning

Design Thinking for Complex Systems

Cognitive Psychology

Publications

Defining Visual Narratives for Mathematics Declaratively

Max Krieger, Wode Ni, Joshua Sunshine

Preprint. PLATEAU (workshop at UIST) '19

Skills

User Interface

Sketch 3, Figma, Javascript (ES7), Typescript, React.js, React Native, Redux

Backend

Django, Express, Go, Python, Java, Kotlin, GNU/Linux, Docker, Kubernetes, Terraform, AWS, GCP

Functional and Formal

OCaml/ReasonML, Elm, Haskell, Type Theory