Max Krieger

maxkrieger@cmu.edu
portfolio: a9.io
github: @maxkrieger

Experience

Reduct - Software Engineering Intern
Summer 2020 | Remote | reduct.video
Prototyped interfaces and machine learning models for the core product.

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.

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 - 2021 (expected)
BSc. Cognitive Science
Minor in Computer Science.
Dean's List with High Honors.

Selected Courses
Parallel & Sequential Data Structures & Algorithms
Language Design & Prototyping
Interpretable Machine Learning
Design Thinking for Complex Systems
Parallel Distributed Processing (cognitive)
Cognitive Psychology

Publications

Penrose: from mathematical notation to beautiful diagrams
Katherine Ye, Wode Ni, **Max Krieger,** Dor Ma'ayan, Jenna Wise, Jonathan Aldrich, Joshua Sunshine, Keenan Crane
ACM Transactions on Graphics / SIGGRAPH '20

Chatting with glue: cognitive tools for augmented conversation
Max Krieger
Convivial Computing Salon (workshop at <Programming>) '20

Defining Visual Narratives for Mathematics Declaratively
Max Krieger, Wode Ni, Joshua Sunshine
PLATEAU (workshop at UIST) '19

Skills

User Interface
Figma, Typescript, Flutter, React.js, Redux

Backend
Django, Express, Go, Python, Kotlin, Docker, Kubernetes, Terraform, AWS, GCP

Functional and Formal
OCaml/ReasonML, Elm, Haskell