# Max Krieger

max@a9.io
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