Boston, MA maxkrieger@cmu.edu portfolio: a9.io github: @maxkrieger

## **EXPERIENCE**

#### **CMU Penrose Group** - Researcher

Fall 2018 - Present | Pittsburgh | penrose.ink

Developing a robust end-user experience for the Penrose project, which aims to render abstract mathematical concepts with intuitive visualizations. Conducted original research through the REUSE 2019 program to develop new kinds of mathematical explanatory media.

#### Flexibits - Intern

Summer - Winter 2018 | Remote | flexibits.com Developed and deployed scalable services to users of 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 - 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

Created 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

Designed and developed a novel 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.

## **Needham High School**

2014 - 2018

National Merit Scholar, 2018.

# **PUBLICATIONS**

# Defining Visual Narratives for Mathematics Declaratively

Max Krieger, Wode Ni, Joshua Sunshine Preprint. PLATEAU (workshop at UIST) '19

## **SKILLS**

## Design

Sketch 3, Figma, Adobe Creative Suite, Blender

#### Languages

Javascript (ES7), Typescript, CSS3/SASS, Python, Java, Kotlin, Go, OCaml/ReasonML, Elm, Haskell

#### **Tools**

GNU/Linux, ROS, Git, React.js/Native, Redux, Electron, PostgreSQL, Redis, MongoDB, Django/Express, Webpack, Bootstrap, Node.js/npm, Docker, Kubernetes, Terraform, AWS/GCP

### **Principles**

UX & HCI, Virtual Reality Design, Responsive Design, Agile/Scrum projects, Functional Programming, Object Oriented Programming, Open Source Contributions