

# MATTHEW KAUFER

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## EDUCATION

**Georgia Institute of Technology** (Georgia Tech), Atlanta, GA

August 2016 – May 2019

- Candidate for B.S. in Computer Science, GPA: 3.88 / 4.00
- Concentrations in Artificial Intelligence & Networking

## SKILLS

**Programming Languages:** JavaScript, Java, Python, HTML, C, PHP

**Frameworks & Libraries:** Django, Node.JS, AWS, React, MongoDB, three.js, Android, Keras, Handlebars

**Spoken Languages:** German (proficient)

## WORK

**Robotic Musicianship Research Lab**

August 2017 – Present

Georgia Tech, Atlanta, GA

- Conduct research using deep neural networks for digital signal processing
- Utilize said networks to interface with prosthetic arm using patent pending technology

**HackGT Tech Team**

November 2016 – Present

Georgia Tech, Atlanta, GA

- Create and maintain technologies such as HackGT's registration app, check-in app, and event websites, handling data from over 4,000 applicants
- Lead workshops to teach students about technologies such as web and android development

**Backend Engineering Intern at Remy**

May 2017 – August 2017

New York, N.Y.

- Built an AWS Lambda function using OCR to automatically extract text from uploaded documents and store them in an ElasticSearch server, allowing audit compliance data to be easily queryable
- Engineered Keras models to estimate monetary impact of financial audits in the healthcare industry
- Created internal analytics platforms in Django to track system health
- Wrote comprehensive unit tests for Remy's backend platform in Django

**Software Engineering Intern at nclud**

June 2015 – August 2015

Washington, D.C.

- Developed websites for clients such as the Nasdaq Stock Exchange and the Marine Corps Marathon
- Created internal projects to facilitate software development
- Built static site compiler used to create Nasdaq's mobile application

## PROJECTS

**MyoThreeArm**

- Developed a wave categorization algorithm to interpret muscle movements from an EMG
- Created a virtual arm with three.js to connect to the algorithm, functioning as a virtual prosthetic
- Categorized unique gestures ranging from a closed fist to letters in sign language

**Emoodji**

- Created an emotion recognition platform for webcam
- Mapped emoji over user's face in real time to display their current emotion
- Designed to help patients with autism better recognize emotions of others

**Meta Drone**

- Created an augmented reality drone control platform using Meta Glasses
- Allows users to control the altitude, pitch, and yaw of an AR.Drone 2.0 using hand gestures

**Mongit**

- Designed a command-line tool which lets users manipulate comments on Reddit.com as a database
- Allows users to leverage Reddit's massive servers to store their own encrypted data as JSON NoSQL