

# NATHAN MANNES

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## EMPLOYMENT

Academia.edu · Software Engineer (Ruby on Rails, React)

Sept. 2021 to May 2023

Chicago, IL (remote)

- Wrote ETL job that ingested hundreds of millions of additional academic paper metadata records from assorted open-access datasets and managed the elevated write DB load
- Designed PostgreSQL database schema for a novel social media experience catered to academics
- Implemented new React components and web pages for the social media experience
- Interviewed candidates. Conducted tech screens and virtual-onsite interview
- Implemented a clustering algorithm to automatically group papers together for users to claim and modified the site to display these clusters, resulting in hundreds of thousands of additional papers claimed per year
- Ideated and conducted AB tests on email marketing and site content that resulted in additional papers claimed and premium upgrades
- Created and modified API endpoints and webpages in a Ruby on Rails framework
- Onboarded three software engineers: 2 seniors and a new grad

Sezzle Inc. · Software Engineer (Go, React)

Sept. 2019 to Aug. 2021

Minneapolis, MN

- Modeled database, implemented changes to checkout process and frontend to create Sezzle Spend, a way of giving customers a discount on future orders, like a giftcard
- Managed a software engineer intern for 2 months
- Created rewards program that encourages users to pay with ACH instead of the expensive Stripe integration
- Implemented asynchronous event reporting in GCP BigQuery
- Combined affiliate links and a Sezzle-issued credit card to allow customers to pay with Sezzle at retailers that Sezzle does not yet partner with
- Wrote several webpages to automate customer-service work flow, saving at least 1,000 customer service hours over 9 months, using React.js with Redux, and wrote backend code in various HTTP-based Go microservices to support the functionality

Carleton College · Computer Graphics Course Assistant

Jan. 2019 to Mar. 2019

Northfield, MN

- Tutored students 1-on-1 in the course material and graded homework

## EDUCATION

Carleton College · Sept. 2015 to June 2019

B.A. Computer Science 2019

GPA: 3.33

CS/Math Coursework: Data Structures, Algorithms, Data Science, Linear Algebra, Software Design, Computability and Complexity, Natural Language Processing, Artificial Intelligence, Quantum Computing, Computer Graphics.

Athletics: Finished 3rd at D-III College Ultimate Frisbee Nationals in 2018 and 2019

## PROJECTS

Senior Comprehensive Exercise

Jan. 2019 to June 2019

Group project to create python software that sniffed packets and analyzed the web traffic of IOT devices to determine how secure they were. Used SQLAlchemy, and Vue.js.

Satire Detection

May 2019 to June 2019

Used a naive-bayes classifier as a baseline for classifying headlines as either from The Huffington Post or from The Onion, and then used a perceptron algorithm to try to improve upon the baseline. It turned out that a naive approach was significantly better than the perceptron algorithm for this task. Used Python

Political Rhetoric Analysis

Oct. 2018 to Nov. 2018

Scraped text of political rallies and programmatically analyzed them for populist rhetoric. Found, with statistical significance, that rallies held in swing states had a higher average amount of populist speech than those outside of swing states. Used Python and R for analysis, and used Tableau for map graphics

## ACTIVITIES/VOLUNTEERING

Dean Phillips For Congress (House Minnesota-03)

May 2020 to Nov. 2020

Wayzata, MN

Produced several HTML/CSS-based graphics for the candidate's website

## SKILLS

**PROFICIENT TECHNOLOGIES (ALPHABETICAL):** AWS EC2, CSS/HTML, Git, Golang/Go, JavaScript, MySQL, PostgreSQL, Python, React, Ruby on Rails

**TECHNOLOGIES I HAVE USED:** Bash/Shell Scripting, C, dbt, Java, Ubuntu, Redis, Vue.js

**OTHER INTERESTS:** Bowling, Cooking, Historical nonfiction, Stand-up comedy, Ultimate Frisbee