

SAMUEL STEVENS

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RESEARCH INTERESTS

Natural language processing, machine reading comprehension and interpretability.

EDUCATION

Ohio State University

Honors B.S. in Computer Science & Engineering
Minor in German
GPA: 3.93

Target Graduation 05/2021

Columbus, OH

RESEARCH EXPERIENCE

Self-Attention Interpretability in Sequence Classification

Undergraduate Honors Research Thesis

October 2019 - Present

Columbus, OH

- Fine-tuned pre-trained language models on existing sequence classification task.
- Manually created adversarial examples to probe language models' understanding of the task.
- Qualitatively analyzed trends in the attention maps of BERT, SciBERT and RoBERTa to identify differences in interpretability.
- Identified a gap in existing literature (no large-scale quantitative measurement of BERT's interpretability on sequence level classification) and (currently) designing experiments leading to a baseline result.

SOFTWARE ENGINEERING EXPERIENCE

Microsoft

Software Engineering Intern

May 2020 - August 2020

Seattle, WA (Remote)

- Developed new Power BI feature to improve customers' ability to diagnose data-refresh problems.
- Authored feature spec to communicate intent and implementation details to feature stakeholders.
- Ramped up quickly in a 100 million-line C++ codebase to begin delivering value immediately.
- Demoed project to Power BI customers to demonstrate value and gain feedback.

TicketBay

Co-Founder and Lead Developer

January 2018 - August 2020

Columbus, OH

- Collaborated with OSU students to develop a mobile app for students to buy and sell football tickets.
- Facilitated the transfer of \$165K worth of tickets between more than 7K customers.
- Led system architecture decisions in order to balance ease of development and system performance.

GE Aviation

Digital Technology Intern

May 2018 - August 2018

Cincinnati, OH

- Built an end-to-end testing solution automate QA testing of customer-facing web application.
- Applied agile methodology in a collaborative environment to meet specs, despite frequent changes
- Completed integration with existing deployment pipeline, leveraging existing infrastructure and leading to a net positive impact on product quality with no additional developer work.

The Ohio State University

Lead Developer

May 2018 - November 2019

Columbus, OH

- Supported a professor's research by developing an online app to distribute rich media.
- Implemented agile methodology to manage 2 student developers in multiple time zones.

GE Aviation

INTERalliance Intern

May 2017 - August 2017

Cincinnati, OH

- In-sourced customer-facing search, targeting \$300K in savings and 40K customers.
- Led MongoDB integration, giving customers access to previously unsearchable documents.

AWARDS

Hack OHI/O, Best UI/UX & People's Choice

2020

Voice-powered, natural language code editor

- Developed a web-based code editor to convert natural, spoken language into Python code in real time.
- Fine-tuned pretrained transformer models and developed a custom parser to convert natural language to structured code.

Hack OHI/O, Best Hack

2019

Accessibility focused text extraction app

- Used Tesseract OCR to extract text from images to provide content in a variety of accessible formats.

Brain Health Hack, Best Project at Large

2018

Parkinson's Disease tracking app

- Developed an Android/iOS app to track a user's tremors to improve effectiveness of medication.

Hack OHI/O, Best Software Hack

2017

Social media trend aggregator

- Developed an iOS application in 24 hours to aggregate trending topics on Twitter and Instagram.

ADDITIONAL INFO

Club Water Polo Risk Manager

August 2020 - Present

Study abroad in Germany, June

June - August 2019