Anton Forsman

📞 (737) 328-2301 | 🖂 anton@cs.utexas.edu | 🌴 anforsm.com | 🖸 anforsm | 😾 anforsm | in antonforsman

Education

The University of Texas at Austin

Austin TX

COMPUTER SCIENCE | EXCHANGE

2023

KTH Royal Institute of Technology

Stockholm, Sweden

MASTER OF SCIENCE IN MACHINE LEARNING | CURRENT GPA: 4.9/5.0 BACHELOR OF SCIENCE IN COMPUTER SCIENCE | GPA: 4.6/5.0

2022-2024

2019-2022

Skills _____

Languages Python, JavaScript/TypeScript, SQL, Java, C, C++, C#, HTML, CSS

Tools

Git, PyTorch, NumPy, Pandas, Docker, React, Next.js, Node.js, Firebase/Google Cloud Platform, PostgreSQL, Linux, Scikit-learn,

Hugging Face

Experience _____

AI Sweden

Stockholm, Sweden / Remote

NLP INTERN

Jun 2023 - Present

- I am currently working at AI Sweden to develop a multimodal GPT model for the Swedish language.
- Using Python I developed a large-scale data pipeline, handling 100,000+ hours of audio and millions of files.
- I conducted countless training runs for 100M-1B parameter GPT models on A100 GPUs.
- I applied many different deep learning models to audio in the data processing pipeline. These include Whisper, EnCodec, a custom BERT model and more.

KTH Royal Institute of Technology

Stockholm, Sweden

SOFTWARE ENGINEER

Aug. 2022 - Jun. 2023

- I developed a full-stack solution which tracks students' progress on homeworks.
- I created a Node.is backend API, with a PostgreSQL database, and hooked into a client-side test framework (Mocha) to send results to the backend. The backend services are all run through Docker.
- Through my work, teachers have been able to get important analytical data, such as students who are struggling, which assignments are too hard and what the most common issues are. In order to do this, I work closely with teachers and assistants to develop relevant SQL queries.
- The server handles data from 200 students per semester, and currently has about 2M data points.

TEACHING ASSISTANT IN ALGORITHMS, DATA STRUCTURES AND COMPLEXITY

Aug. 2022 - Jan. 2023

- Teaching Assistant for a second-cycle course in algorithms, data structures and complexity.
- During the course, I helped students design novel algorithms for the given course assignments. I also examined the students' labs.

HEAD TEACHING ASSISTANT IN INTERACTION PROGRAMMING AND THE DYNAMIC WEB

Nov. 2021 - Aug. 2022

- Teaching Assistant for a second-cycle course in web development.
- · As a TA, I graded and helped students with their homeworks and projects in React and Vue. For my work, I received multiple personal commendations in anonymous course surveys.
- I was responsible for public communication with students taking the course. I organized a discussion panel for the students, with representatives from Bontouch, OmegaPoint and more.
- I also helped with course development such as automating plagiarism detection and managing git workflows in the students' individual GitHub repositories.
- After my first semester of being a TA, I was promoted to lead the other assistants.
- As a head TA, I oversaw and organized the other (8) course assistants. In addition to helping 200 students through the course, we also developed a unit test suite which the students could run on their React and Vue homeworks.

Auto-Maskin Sweden / Remote

SOFTWARE ENGINEER

Jun. 2021 - Aug. 2021

- I developed a plugin in C++ for the open-source CAD software KiCad. The plugin is able to import electrical circuit diagrams and component libraries from TinyCAD.
- · My work enabled the company to migrate hundreds of proprietary diagrams to the new CAD software.
- I gained experience with working with Git and contributing to larger projects.

Freelance Sweden / Remote

SOFTWARE ENGINEER

Jun. 2019 - Jun. 2021

· I developed an application in Python for reading real-time data from a USB-device, as well as statistical analysis and visualization of said data.

• The work was done for a professor at Lund University for research purposes.

Projects

Below are some of the projects that I have created. More can be found on my portfolio website anforsm.com and on my GitHub. (/anforsm)

Movieguesser

- I created a daily movie guessing game which mixes data from different data sources.
- Created using technologies such as React, TailwindCSS, TypeScript, Google Cloud Functions.
- Availalable at: movieguesser.com.

TV Ratings

- TV Ratings is somewhat of an extension to IMDb, which shows the ratings of individual tv episodes in a tabular and color-graded format.
- To develop the application, I mostly worked with Next.js / React in TypeScript.
- · Available at: tvratings.anforsm.com.

Tickertracker

- My colleague Ludvig Siljeholm and I created a webapp that tracks and presents sentiment on stocks on the social media platform Reddit.
- Created using technologies such as React, SCSS, JavaScript, Redux, Google Cloud Functions.
- Available at: tickertracker.anforsm.com.

Homelab

- In my free time, I often experiment with sysadmin and networking tasks at home, running multiple public facing servers.
- Some of the services I run are: content delivery with Plex, game servers with Pterodactyl, and a smart home platform with Home Assistant.
 I work a lot with virtualization (including Docker), proxies, Linux in general and network security.