Roham Koohestani

Scientific Developer

Delft, Netherlands
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Linkedin, GitHub

Date / Place of birth

17 Aug 2004, Tehran

Nationality

Dutch

Skills

AI4SE

Machine & Deep Learning

Scientific Programming

Software Design & Development

Reserach & Development

Technical Writing & Scientific Communication

Problem Solving & Critical Thinking

Presentation & Communication Skills

Languages

Persian

English

Dutch

Profile

As a second-year Computer Science and Engineering student at Delft University of Technology, I am deeply passionate about artificial intelligence, machine learning, and programming. Currently, I work as a scientific developer at the AISE Lab at TU Delft, where I contribute to research projects focusing on improving LLMs4Code. I have over a year and a half of experience in synthetic data generation, including a software engineering internship at Syntho, where I worked on minimizing bias in data and designed scalable time-series generation methods. My long-term goal is to become a professor and contribute to groundbreaking research in AI and data science.

Employment History

Scientific Developer, AISE-TUDelft, Delft

July 2024 — Present

As a scientific developer at the AISE Lab at TU Delft, I am actively engaged in research aimed at advancing the state of software engineering through cutting-edge AI techniques. Under the supervision of Dr. Izadi, I contribute to projects focused on enhancing LLMs4Code, exploring innovative approaches that leverage large language models to optimize software development processes. This position allows me to work at the forefront of AI research, collaborating with experts to implement new methodologies that have the potential to revolutionize the way we approach software engineering. Through this role, I am gaining invaluable experience in both research and development, while pushing the boundaries of what AI can achieve in this field.

Software Enginnering Intern, Syntho B.V., Amsterdam

September 2023 — June 2024

During my internship at Syntho, I was involved in several critical tasks, including the assessment and performance evaluation of synthetic data generation methods. I worked on:

- Crafting detailed technical evaluations to benchmark synthetic data generators, comparing their performance with open-source alternatives.
- Investigating and integrating cutting-edge developments from academic literature to enhance synthetic data generation techniques.

- Contributing to the design and implementation of advanced synthetic data generation processes, ensuring alignment with state-of-the-art practices in the field of data science.

One of my key achievements was conceptualizing, designing, and implementing a novel method for synthesizing time-series sequences conditioned on metadata. This approach, which was highly parallelizable and scalable, marked the culmination of my internship and utilized a wide range of skills I had developed during my time at Syntho.

High School Intern, Syntho B.V., Amsterdam

September 2022 — September 2023

In my role as an intern at Syntho, I focused on researching ways to minimize bias in data, aiming to ensure fairness in machine learning systems. This involved applying synthetic data generation techniques to create unbiased datasets for use in various AI applications. I also contributed to ongoing projects related to fairness in AI and data science.

Education

Computer Science & Engineering, Delft University of Technology, Delft

September 2023 — Present

Nature & Technology (N&T), Het College Weert, Weert

August 2020 — July 2023

Publications

Leveraging Large Language Models for Enhancing the Understandability of Generated Unit Tests

Amirhossein Deljouyi, Roham Koohestani, Maliheh Izadi, Andy Zaidman

Accepted at the International Conference on Software Engineering (ICSE '25) · Aug 2024

Volunteering

Treasurer & Head of Internal Affairs, D.I.S.A. Alborz, Delft

October 2023 — Present

In my role as Treasurer and Head of Internal Affairs at D.I.S.A. Alborz, I work alongside the board to promote unity and cultural integration within the student community. I am responsible for overseeing financial management and organizing key cultural events such as Yalda and Nowruz, which celebrate Iranian heritage while engaging people of diverse backgrounds. These events not only enhance cultural awareness but also help foster a sense of belonging for Iranian students within the broader international community. Through careful planning and a focus on inclusivity, our team is dedicated to promoting cultural exchange and building a cohesive, multicultural environment.