






Efe Sahin

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Technical Skills

Deep Learning, LLMs, Diffusion, Time Series Forecasting, VAE | Pytorch, Scikit-learn, TensorFlow, Numpy, Pandas, Matplotlib, Seaborn, UI, Solara | Hugging Face, Colab, Kaggle, Nvidia HPC, Latex | Git, Linux, Shell, Bash, C, Docker | Apache Spark, AWS, DataBricks, MATLAB, Excel, SQL

Work Experience

Columbia Data Analytics, Junior Programmer Manhattan, NY, 10013

08.2023 - Present

Updated frequently used programs to work well with others. Delivered counts of drugs, diagnostics, and procedures and helped build attrition tables for 6> different requests per week.

Joined weekly pipeline and occasional project discussion meetings with marketer and Project Managers.

Acted as the versatile quick-fix go-to person in technical and non-technical issues in the dynamic startup environment.

Team/Personal Projects

LLM Performance Testing: Developed testing code for 11 models to evaluate inference speed and output length to a variety of input prompts.

Hdmr-opt app2scale: Developed a wrapper function to optimize XGB hyper-parameters for forecasting e-commerce transaction load data.

RealTime Speech Censorship: In the group project, helped design a multi-threaded module to "bleep" out banned words in real time and documented a model card for the OpenAI whisper model.

Smooth Life Cellular Automaton:

Implemented Smooth Life paper and developed interactive UI for tuning parameters of the simulation.

Instrumented Mouthguard Design:

Researched ways to record and transmit kinetic data inside a mouthguard. The team was given 2nd place in the K12 awards.

Maze solver via auto-encoder:

Generated a custom maze dataset and developed an auto-encoder network to solve it. Outputs drew silhouettes of the paths with about 90% accuracy.

32-bit pipelined CPU design: Implemented design that computed Addition, Subtraction, OR, AND, and XOR commands in Verilog. The design was optimized for recall and speed.

Fs3 In-memory filesystem: Developed a double-linked-list-based in-memory file system with cache, read, write seek, in C language inside an Ubuntu machine.

Education

Penn State University, University Park, PA

2020 - 2023

Completed Bachelor of Computer Science, B.S. Engineering in 3 years with a 3.40 GPA.

International Baccalaureate, Istanbul, Turkey

2016 - 2020

Completed IB Diploma program when attending MEF International School and took advanced courses e.g.: HL ITGS, HL Math

Certs. & Schools

Generative AI with Large Language

Models 02.2024: Completed the course from DeepLearning.AI and AWS. Learned about technical work done in developing LLM Apps. Implemented the learnings in Amazon SageMaker studio.

Fundamental Neuroscience for

Neuroimaging 01.2024: Completed course from Johns Hopkins to learn about structural and functional brain scanning technologies.

Kaplan International School, Manhattan,

NY, 10118 08.2018: Completed TOEFL and Academic English Intensive course for one month with 100% attendance.

Agile Project Management 01.2024:

Completed the course by Google on customer-focused project management in software companies.

Data Scientist with Python 12.2023:

Completed the track of 90 hours by Data Camp.

Purdue University, West Lafayette, IN

07.2017: Completed GERI residential summer camp and took 4 courses.

Generative AI for Everyone 01.2024:

Completed the course from DeepLearning.AI to learn about general introduction to the field.

Harvard University, Cambridge, MA

06.2019 - 08.2019: Completed residential extension school program and took two undergraduate courses simultaneously:: (A) Programming with Python and (B) Computer Science with Java

Learning Achievements

CMPSC 497 Deep Learning for Computer Vision: (A-)

MATH 452 Deep Learning Algorithms and Analysis: (A-)

MATH 486 Theory of Games: (A-)

CMPSC 465 Data Structures and Algorithms: (B+)

EE456 Intro to Neural Nets: (A-)

BME 450W Biomedical Senior Design: (A-)

Languages

Turkish (Native), English (Advanced), Latin (Salve Mundo), Spanish (Hola Mundo)

Hobbies

Reading non-fiction books, Watching science-fiction movies, Basketball, Swimming