## Efe Sahin







**Technical Skills** 

Pytorch, Scikit-learn, TensorFlow, Numpy, Pandas, Matplotlib, Seaborn, Colab, Kaggle, Latex | Git, Linux, Shell, Bash, C, Docker | Apache Spark, AWS, DataBricks, MATLAB, Excel, SQL Java, Swing, Apache Derby, DrRacket,

JavaScript, DrRacket, Verilog HDL

**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 both technical and non-technical issues in the dynamic startup environment.

## **Team/Personal Projects**

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.

**Instrumented Mouthguard Design:** 

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

Maze solver via auto-encoder: I 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 CPU design that computed Addition, Subtraction, OR, AND, and XOR commands. The design was optimized for recall and

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

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

**International Baccalaureate,** Istanbul, Turkey

2016 - 2020

2020 - 2023

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

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

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