

SIMON AYTES

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EDUCATION

Lehman College, City University of New York

B.S. in Computer Science, Minor in Data Science. GPA 3.95/4.00.

August 2018 - December 2022

Class of 2022

PROFESSIONAL EXPERIENCE

Penta Group

Data Scientist

New York, NY

September 2021 – Present

- Created and deployed a web-based solution on AWS to deliver intuitive analytical tools to non-technical analysts. Developed Jupyter notebooks with Voila for interactive dashboards, enabling seamless data exploration and analysis.
- Developed an industry-first social listening tool for TikTok videos, utilizing AI-based machine transcription and clustering algorithms. Extracted conversation themes, providing deeper insights beyond numerical metrics.
- Led the technical integration of a legacy data source into our databases. Refactored code and conducted validation testing to ensure consistent analysis outputs across both systems.

Wall Street Journal

Journo-Tech Fellow

New York, NY

August 2021 – December 2021

- Designed a machine learning model to predict an article's unique page views based on its headline, achieving a correlation coefficient of 0.85 with actual views.
- Utilized structured data from WSJ's databases to train the model, tested on real-time data.
- Wrote and optimized SQL queries to segment data from existing databases, optimizing the data pipeline and reducing query response time by 50%.

NASA Langley Research Center

AR/VR Solutions Development Intern

Hampton, VA

June 2020 – August 2020

- Designed and developed an applied data-engineering tool in virtual reality using Unreal Engine, facilitating immersive data exploration for research purposes.
- Researched and developed novel 3-dimensional data visualization techniques in virtual reality, enhancing data understanding for researchers and stakeholders.

PUBLICATIONS

Sarah M. Lehman, Newton H. Campbell, **Simon A. Aytes**, Mitchell Kirshner, and Anthony Arviola. "EnDEVr: An Environment for Data Engineering in Virtual Reality." IEEE, 2021.

SKILLS

Programming Languages

Python, R, SQL, C#, C++, Git

Software

Jupyter Notebooks, Excel, Google Workspace, RStudio

Packages

Tensorflow, Scikit-Learn, Pandas, NLTK, Keras, Numpy

Spoken Languages

English (Native); German (Proficient); Korean (Elementary)