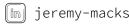
Jeremy Macks

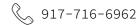
Machine Learning Engineer/Cognitive Scientist











EXPERIENCE

JACOBS SOLUTIONS | JOHNSON SPACE CENTER | NASA MACHINE LEARNING INTERN May 2022 - October 2022 | Houston, TX

- → Contributed to a small interdisciplinary team supporting the ISS crew and various other researchers focusing on International Space Station imagery.
- → Developed pipeline for recognizing text in various different background utilizing multiple deep learning models as well as transformers.
- → Researched and tested different models to be utilized and potentially fine-tuned for image detection task.

FACTSET RESEARCH SYSTEMS | SOFTWARE ENGINEERING INTERN

May 2021 - August 2021 | New York City, NY

- → Built prototype for matrix multiplier method using AWS and C++ for quantitative risk
- → Researched, tested, and presented different strategies for optimizing matrix multiplication cost and time.
- → Utilized AWS Graphics Instances, programming specifically on the GPU and utilizing CUDA for optimization

LACAI LABS | Machine Learning Researcher

January 2021 - May 2022 Troy, NY

- → Employed in undergraduate research project under Professor Tomek Strzalkowski.
- → Researched topic modeling algorithm for use in agenda classification problem for French Election twitter data.
- → Trained, tested, and validated multiple dialogue act classification algorithms, eventually fine-tuning an attention based model using sequence prediction.

RENSSELAER POLYTECHNIC INSTITUTE | UNDERGRADUATE MENTOR

January 2021 - May 2021 | Troy, NY

- → Assisted lecturer in maintaining timely schedule by grading assignments and holding office hours.
- → Covered topics including documentation, version control, databases, web development, open source licensing, app development, testing, Tensorflow, and others.

PROJECTS

AUTOMATED REDDIT ACCOUNT DETECTOR PYTHON, PRAW, PYTORCH, NUMPY 2022

- → Scraped large amounts of social media data from Reddit, some generated from large language models, some generated by real users.
- → Training and building a fine-tuned transformer model to complete classification of the author of the comments.

SENTIMENT ANALYSIS PYTHON, SKLEARN, TWEEPY

- → Scraped, structured, and built dataset of various political figure's Twitter history.
- → Trained a highly scalable language processing model using supervised learning on a dataset of 50,000 IMDb reviews.
- → Controlled for average sentiment and political party affiliation in order to find statistically significant insights.

SKILLS

PROGRAMMING

Languages

Python • C++ • C • CMake • C# • LATEX • Java

LIBRARIES/FRAMEWORKS

PyTorch • Tensorflow • SpaCy

• Pandas • SKlearn • Matplotlib • NumPy • SciPy • NLTK •

Transformers • OpenCV • Eigen • WandB • XGboost

TOOLS/PLATFORMS

Git • AWS • CUDA • RStudio • UNIX • Unity • Jupyter Notebooks

CURRENTLY LEARNING

Haskell • SQL • Ensemble Methods

EDUCATION

RENSSELAER POLYTECH-**NIC INSTITUTE**

MASTER'S IN COGNITIVE SCIENCE, CO-TERMINAL PROGRAM Fall 2022 - Spring 2023 | Troy Cum. GPA: 3.8 / 4.0

RENSSELAER POLYTECH-NIC INSTITUTE

BACHELOR'S IN COMPUTER SCIENCE AND COGNITIVE SCIENCE August 2018 - May 2022 | Troy, NY Cum. GPA: 3.2 / 4.0

Coursework

UNDERGRADUATE

Machine Learning from Data • Information Retrieval • Human and Machine Learning • Game Al

GRADUATE

Computational Finance • Computational Vision

• Economics and Computation