Jeongin Lee

New York, NY, 10003 jeonginlee0304@gmail.com | Linkedin | Github

EDUCATION

New York University Abu Dhabi

May 2024

B.S. Computer Science | Minor in Applied Mathematics, Interactive Media

Abu Dhabi, UAE | Currently in New York, NY

- GPA 3.75
- Awarded a full admission scholarship
- Certificates: AWS Solutions Architect Associate, Deep Learning Specialization from DeepLearning.Al
- Coursework: Data Structures, Algorithms, Linear Algebra, Computer Systems Organization, Operating Systems, Agile Software Development & DevOps, Discrete Math, Multivariable Calculus

EXPERIENCE

Google Summer of Code, Processing Foundation (GitHub | Website)

June 2022 - September 2022

Remote

- Open Source Developer
- Developed and launched an open-source Machine Learning library (<u>link</u>) for Processing using TensorFlow, MXNet, Java, IntelliJ, and Gradle, currently with 380+ downloads.
- Devised original Java APIs using OOP design principles that enable artists and beginners to easily develop AI applications using different CV and NLP models on images and live webcam videos.
- Wrote step-by-step tutorials with code examples and created a library documentation website (<u>link</u>) with a 99/100 performance score in Google PageSpeed Insights using Figma, HTML, CSS, Javascript, React.js, and GraphQL.

MoMA Lab, New York University (Presentation)

May 2022 - July 2022

Remote

Machine Learning Research Assistant

- Implemented and evaluated different Machine Learning algorithms (GRU, LSTM, SR-CNN) using TensorFlow, PyTorch, and Jupyter notebook to research ML-based cyber defense techniques for Industrial Controls Systems (ICS).
- Preprocessed and visualized the HAI security dataset that contains over 1 million unique rows using NumPy, Pandas, and Matplotlib.
- Increased the detection accuracy by 29% (F1 Score) by applying techniques such as hyperparameter tuning, moving average, and gray area smoothing.

PROJECTS

<u>Type Your Words</u> (Python, Django, HTML, CSS, Javascript, AWS)

January 2021 - March 2021

- Developed and deployed a full-stack Django, Python website that creates a generative artwork based on what user types.
- Implemented a custom randomization algorithm to create a visually dynamic image for each HTTP POST request, which has generated 360+ unique images.
- Designed a serverless cloud architecture using AWS API Gateway, Lambda, S3, RDS, and VPC to deploy the website.

MUSAIK (HTML, CSS, Javascript, Node.js, React, Express, MongoDB)

September 2022 - December 2022

- Developed a full MERN stack web application that supports live radio hosting with Spotify API in a team of 6 using Agile methodology.
- Designed the wireframe and implemented the front-end, back-end, and MongoDB schema of the app to create and join each session with REST API calls.
- Deployed the RESTful web app on a cloud environment using DigitalOcean droplet and automated CI/CD with GitHub Actions.

<u>Dr. Jarvis</u> (Python, Machine Learning, Natural Language Processing)

September 2021

- Built a Machine Learning-powered medical transcript classifier that helps patients diagnose their symptoms in real-time on a Python,
 Streamlit website.
- Trained SVM, KNN, and Random Forest models with a medical transcription dataset from Kaggle (around 5,000 values) using Python, NumPy, Pandas, and scikit-learn.

Syllabus To Calendar (Python, Machine Learning, Natural Language Processing)

November 2021

- Developed a Python command-line application that automatically generates Google Calendar events from a course syllabus PDF using Stanford's SUTime NLP library.
- Implemented a custom logic to detect keywords and export them as a CSV file and documented the installation guide in Markdown.

SKILLS

Programming Languages: Python, Java, C/C++, HTML, CSS, Javascript, MATLAB

Tools & Frameworks: Linux, Git & GitHub, Agile Methodology, AWS, Node.js, React, Express, MongoDB, jQuery, GraphQL, NumPy, Pandas, TensorFlow, PyTorch, Matplotlib