

# Yonathan Daniel

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## EDUCATION

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### Columbia University

*Master of Science, Computer Science*

May 2024

*New York, NY*

- Natural Language Processing, Machine Learning, Artificial Intelligence, Introduction to Databases, Cloud Computing and Big Data, Applied Machine Learning, Analysis of Algorithms, High Performance Machine Learning, Private Systems, Computer Vision II

### The Pennsylvania State University

*Bachelor of Science, Computer Engineering*

May 2021

*University Park, PA*

- Dean's List (4 Semesters)
- Operating Systems, Microcontrollers and Embedded Systems, Digital Image Processing, and Data Structures and Algorithms, Computer Architecture

## LANGUAGE AND IT SKILLS

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**Languages:** Python, Java C/C++, Go/Golang, Javascript, SQL, MATLAB

**Tools:** Git, Flask, Django, Postman, Numpy, JUnit, PySpark, Pandas, Matplotlib, Sklearn, Weights and Biases, CUDA, PyTorch, TensorFlow, Keras, Slurm

**Infrastructure:** AWS, GCP, Kubernetes, Linux, Docker, Kubernetes, MiniKube, Terraform, Elasticsearch

## WORK EXPERIENCE

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### Derma AI+

*Backend Developer*

Aug 2023 - Dec 2023

*New York, NY*

- Developed a convolutional neural network (using TensorFlow) trained on various skin conditions to deliver a prediction for a patient's skin condition; achieving 76% accuracy
- Supplied Doctor Recommendation service utilizing previous prediction to display information on doctors from New York, provides option in UI for the user to schedule a meeting via Chat service, reduced latency with opensearch instance
- Implemented Chat service via API Gateway and websockets to provide real time chat feature with doctor and patient, facilitated via Lambda function handling the connection, messaging, and disconnection between the two individuals
- Utilized AWS services, including SageMaker, OpenSearch, API Gateway, and Lambda, to enhance the functionality and efficiency of the Derma AI+ project, hosting the entire application on AWS for improved scalability and performance

### Smart Photo Album

*Full Stack Developer*

Oct 2023 - Nov 2023

*New York, NY*

- Implemented a photo album management system supporting picture uploads with a label(s) sent as metadata and image search feature providing voice and text options
- Incorporated CI/CD via AWS Codepipeline to update lambdas and frontend for every update to respective github repository, decreasing setup time by 40%
- Delivered Infrastructure as Code (IaC) using AWS CloudFormation to automate creation of services required to deploy the project; while hosting the application on AWS for improved scalability

### Ecommerce Shop Application

*Backend Developer*

Jan 2023 - May 2023

*New York, NY*

- Built ecommerce application in Python processes all operations for store, logs all transactions, and provides owner access to vendors with product proposals
- Delivered service for store owners to ban vendors or products when deemed unsatisfactory as well as the ability to manually access and update the stock and prices of products
- Developed with Flask and Postgresql and deployed via the Google Cloud platform and met with project mentor at specified checkpoints and exceeded all requirements of project

### Capstone: AMADS-Autonomous Mapping and Adversarial Detection System

*Maze Developer*

Jan 2021 - May 2021

*State College, PA*

- Conspired with a team of twelve on developing a robot simulation to identify object of interest, identify the shortest path, and autonomously map surroundings for sponsor Lockheed Martin
- Led development by designing maze in the simulation and researching ROS Gazebo mechanics, decided roles based off of group members previous experience and preferences
- Enhanced Lockheed Martin's autonomous capabilities by developing a robot maps unknown areas and detects objects, boosting safety and decision-making for rescue and reconnaissance missions