Niel Parekh (he/him)

niel.parekh24@gmail.com|+1(413) 472-9152| LinkedIn | GitHub

EDUCATION

University of Massachusetts Amherst   September 2022 - May 2024
Masters of Science, Computer Science   *CGPA : 3.7*
Coursework : Advanced Algorithms, Machine Learning,Systems for Data Science, Applied Information Retrieval, Applied Statistics and Advanced Natural Language Processing

SSN College of Engineering, Chennai   August 2018 - June 2022
Bachelor of Engineering, Computer Science   *CGPA : 3.6*
Coursework :Artificial Intelligence,Deep Learning,Data Structures,Probability & Statistics,Operating systems,Database management systems,Python & R in Data Science,Internet Programming,Social Network analysis,AWS fundamentals,Software Engineering

TECHNICAL SKILLS

Languages: Python, C, C++, Java, SQL, HTML, CSS
Software libraries and tools: NumPy, Pandas, Keras, Boto3, Elasticsearch, LaTeX, Flask, Twilio

WORK EXPERIENCE

Prosimo   Mountain View,California
Data Science Intern   June 2020– August 2020
● Analyzed data using Kibana with data injected into ElasticSearch to create intuitive dashboards aiding in cloud orchestration.
● Developed python scripts that accessed AWS S3 cloud storage to extract data and conceptualize it.

LatentView Analytics   Chennai, India
Intern   May 2021 – July 2021
● Deployed an automated chatbot made with several Azure services like QnA maker for pre-processing the files.
● Integrated the front-end made using React with mock API's, created using Flask, which were tested using POSTMAN.

University of Cyprus   Nicosia, Cyprus
Research Intern   June 2021 - Nov 2021
● Received funding from European Union's Horizon 2020 research and innovation programme to identify DDoS attacks on devices.
● Researched several machine learning algorithms including LBGM, Random Forest, XG Boost and AdaBoost.
● Tested the models on a dataset generated using Kali Linux and Termux, emulating the slowloris attack.

PUBLICATIONS

Face mask detection using SSDNET and lightweight custom CNN
ICICNIS 2021 - Elsevier SSRN
Detection of DDoS attacks in D2D Communication Environment Using Machine Learning and Cloud Computing
Computer Communications Journal
Malaria Cell Detection using Depthwise Separable CNN
Journal of Computing Science and Engineering

PROJECTS

Identifying Vulnerabilities in Cloud Platforms
● Predicted resource vulnerabilities on cloud platforms like AWS and GCP.
Passport Application Management System
● Integrated the Flask and SQL back-end with the front-end made using HTML and CSS.
Flight Fare Prediction
● Modeled a random forest algorithm to predict domestic flight fares in India.
● Designed the front-end using HTML and CSS.
Automated Home Security System
● Designed a system that captured the photo of anyone entering a house using a raspberry pi camera.
● Ran facial recognition algorithms to identify the photo or alert home owners via SMS using Twilio.

LEADERSHIP / COMMUNITY SERVICE

● **Collegiate :** Event Head at SSN Invente 2021, Under Secretary-General at SSNMUN 2022
● **Neighborhood Volunteer**: Volunteered in tree plantation drives and blood donation camps; relief work during the Chennai floods
●**Spirituality**: Completed a 4 year Spiritual Touch programme by Shrimad Rajchandra Mission Dharampur