

Vineeth NC

ncvineeth97@gmail.com | [v1neethnc.github.io](https://github.com/v1neethnc) | Baltimore, MD

EDUCATION

University of Maryland, Baltimore County <i>Master of Science in Computer Science</i> GPA: 3.95/4.00	Baltimore, MD <i>Aug. 2021 – Present</i>
Birla Institute of Technology and Science <i>Diploma in Artificial Intelligence and Machine Learning</i> GPA: 3.73/4.00	Hyderabad, India <i>Apr. 2019 – Apr 2020</i>
Jawaharlal Nehru Technological University - Hyderabad <i>Bachelor of Technology in Computer Science</i> GPA: 3.44/4.00	Hyderabad, India <i>Jun. 2014 – Jun 2018</i>

EXPERIENCE

Research Associate <i>IT Wizlab</i>	Oct. 2018 – Mar. 2020 <i>Hyderabad, India</i>
<ul style="list-style-type: none">• Authored beginner and specialized courses for Python and Machine Learning.• Worked on the company's Learning Management System and wrote 1000+ Python and Machine Learning codes.• Wrote beginner courses for: Regression, Feature Engineering, Supervised Learning and Classification.• Handled sysadmin work for a network of about 50 systems.	
Data Engineer – Intern <i>Amazon Development Centre</i>	Jun. 2017 – Jun. 2018 <i>Hyderabad, India</i>
<ul style="list-style-type: none">• Scripted ETL code to perform optimal database migration of tables totalling over 100 million rows of data.• Studied existing relational databases on Oracle to design counterpart for Amazon Redshift.• Built 30+ reports and analyses on Amazon Quicksight based on Redshift databases.• Authored about 10 whitepapers about the limitations of the then-AWS technology in the context of the project.	
Cybersecurity Researcher – Intern <i>Spyry Technologies</i>	Dec. 2016 – Jan. 2017 <i>Bangalore, India</i>
<ul style="list-style-type: none">• Learned and gained real time experience about vulnerability assessment and penetration testing.• Conducted a web vulnerability assessment for a client and wrote a report regarding the different issues on the site.• Built a sample unsecure website from scratch and implemented incremental cybersecurity measures.• Identified and patched different issues on the client site like SQL Injection and XSS.	

PROJECTS

Data Augmentation Comparison Study <i>Python, Neural Networks, Databases</i>	Apr. 2022 – May. 2022
<ul style="list-style-type: none">• Project to generate new augmented training dataset using GANs to train classification model.• Constructed a multiple-discriminator GAN to generate images and corresponding labels.• Trained about 30 models by varying input dataset sizes and performing hyperparameter tuning.• Contrast image classification model performance by varying the training datasets.	
Benchmarking Image Classification CNNs <i>Neural Networks, Machine Learning</i>	Sep. 2021 – Dec. 2021
<ul style="list-style-type: none">• Project to compare performance of VGG16, VGG19, ResNet50, ResNet101.• Wrote the entire multi-class classification VGG training and testing code from scratch.• Analyzed and selected best performing models among VGG and ResNet models for image classification tasks.• Benchmarking included accuracy metrics and tracking system memory and energy usage.	
Baltimore City Crime Data Dashboard <i>Data Visualization, Data Analysis</i>	Sep. 2021 – Dec. 2021
<ul style="list-style-type: none">• Built a data dashboard to track and visualize Baltimore city crime statistics.• Analyzed over 400k rows of data to build over 15 graphs and charts to provide insights into crime trends.• Performed data cleaning, feature engineering, data analysis, and built data statistics.• Wrote code to build Python visualizations using Pandas, Numpy, Matplotlib, and Seaborn.	
Mediclaim Processing <i>Machine Learning, Classification, Neural Networks</i>	Mar. 2020 – May. 2020
<ul style="list-style-type: none">• Project aimed at predicting whether a given medical insurance claim will be accepted or not.• Performed data cleaning and feature engineering on a dataset of 150000 rows.• Built 15 classification and neural network models and compared their performance.	

TECHNICAL SKILLS

Languages: Python, C, Go, SQL (MySQL, Oracle, Redshift), HTML/CSS
Fields: Machine Learning, Data Visualization, Data Science
Tools: Git, Amazon Redshift, Amazon Quicksight, VS Code, Visual Studio, Jupyter, MySQL Workbench
Libraries: Pandas, NumPy, Matplotlib, Scikit-learn, Keras, Tensorflow, Seaborn