Vasudev Menon

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Education

North Carolina State University Raleigh, NC

Bachelor of Science in Computer Science | Cum. GPA: 4.0/4.0 *Expected Spring 2026*

- Coursework: Calculus I/II/III + Differential Equations, Software Development, Discrete Mathematics, Data Structures & Algorithms, Linear Algebra

Experience

Data Scientist in Training Intern June 2021 – Feb. 2022

Rice University & North Carolina State University *Remote*

- Extrapolated and researched COVID-19 sequence data using R.
- Utilized one-hot-encoding, Principal Component Analysis, and Multidimensional Scaling to examine and transform the DNA sequence data.
- Applied dimensionality reduction algorithms to come up with research findings.
- Observed key differences between over 100,000 virus strains by examining resultant cluster formations.
- Presented research at the Junior Science and Humanities Symposium.

Field Organizer Aug. 2020 – Nov. 2020

National Senatorial Committee *Raleigh, NC*

- Developed a Python Selenium based program to automate a survey process that played a strategic role contacting over 600,000 voters and gathering crucial political data for an NC Senator.
- Lead a team of 60+ Field Organizers responsible for calling and contacting voters to collect voter data.

Customer Service Clerk March 2022 – June 2022

Harris Teeter *Morrisville, NC*

- Provided excellent customer service to customers while leading the team on the store's front end.
- Trained on every aspect of front end store management.
- Worked with management to fulfill customer's desires.

Software Development Intern June 2020 – Aug. 2020

Troodon Technology *Remote*

- Helped develop software to help track healthcare & hospitality workers.
- Worked on creating a mobile application using the AngularJS framework.

Projects

NCDMV Appointment Automation | *Python 3, Selenium, Git* June 2021 – Present

- Developed software to automatically find a DMV appointment and register a user
- Utilized Python Selenium based automation to detect when individuals unregister from DMV license appointments then automatically registers users at the respective timeslot.
- Maintained and updated the software as changes were made to the DMV website and utilized Git for version control

Fuel Economy & Automobile Safety Project | *R, RStudio, GGPlot, Excel* Sep. 2021 – Feb. 2022

- Utilized National Highway Traffic and Safety Administration APIs and Government Fuel Efficiency APIs and developed an R program which gauges the regression between the two variables.
- Utilized different regression methods and techniques to assess the relationship between fuel efficiency and automobile safety.
- Produced a research paper with the findings.

Technical Skills

Languages: Python, Java, C/C++, R, PowerShell, SQL
Frameworks: JUnit, Selenium, Angular, Flask, Django, Metasploit, Firebase API
Developer Tools: Git, Eclipse, MySQL Workbench, CheckStyle, PMD, Jenkins, RStudio, GGPlot, R Tools, EclEmma, Visual Studio
Libraries: pandas, NumPy, PyTorch, Matplotlib, cryptography, selenium
Generic Skills: Harvard CS50, HTML, CSS, Word, Excel, PowerPoint, Google Docs/Slides/Sheets
Concepts: Data Structures, FSAs, Number Systems, Boolean Algebra, LISP, Digital Electronics, Assembly Language, Graph Theory, Diffie-Hellman Key Exchanges, Hash Algorithms, One-hot-encoding, Principal Component Analysis (PCA), Singular Value Decomposition (SVD), Multidimensional Scaling (MDS)