

Varun Tanna

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103 Runningdeer Drive
Mooresville, NC, 28117

Education

University of North Carolina at Chapel Hill

Spring 2021

B.S. Computer Science, B.S. Statistics and Operations Research

Courses: Data Structures, Algorithms, Computer Organization, Files and Databases, Web Development, Data Science, Machine Learning, Distributed Systems

Clubs: UNC Dev-App, Carolina Analytics and Data Science, CS +Social Good, Product Management Club

Skills

Programming Languages: Java, Python, Javascript, HTML/CSS, R, SQL, Flutter/Dart

Software Tools: Git, Firebase, Splunk, Tableau, IBM WebSphere, Earth Engine, Flask, GraphQL, Cypress

Work Experience

Software ToolSmith Developer at UNC-CH School of Computer Science Mar 2020 – Present | UNC Chapel Hill

- Worked on a seat assignment application for college classes using Python, JS and Flask.
- Fully tested application using Cypress and completed CI integration with GitLab.

Research Intern at UNC-CH School of Education

Jan 2020 – Mar 2020 | UNC Chapel Hill

- Built an interactive learning module for 8th grade chemistry students with an automated feedback system.
- Dashboard format with multiple levels and animated exercises built in JS (jQuery).

Software Engineering Intern at Fidelity Investments

May 2019 – Aug 2019 | Durham, NC

- Produced a fully secure XML/JSON parser using Spring MVC and implemented it in a QA tool used by Fidelity Brokerage Technology, which tracked and fabricated messages on an IBM messaging queue(MQ).
- Sped up client interaction during monetary transactions by completing migration of a message processor using multiple IBM MQ's, and SOAP requests to streamline processing of incoming messages.
- Tested and ensured accurate message handling using Splunk to track message flow.

Teaching Assistant for Introduction to JAVA

Aug 2018 - May 2019 | UNC Chapel Hill

- Create lesson plans and taught recitation classes of 20+ students with emphasis on OOP in JAVA
- Lead interactive tutoring sessions, proctored exams, and provided valuable assignment feedback.
- Host office hours for 400+ students to explain JAVA programming concepts and assignments.

Project Experience

Founder and President of the UNC Dev-App Club

Oct 2018 – Present

- Teach mobile development essentials to students in React Native and Flutter on a bi-weekly basis.
- Increased member attendance to 40 regular members by instituting weekly project tutorials sessions.
- Lead project teams when producing apps such as a Campus Events App to solve real problems.

Forest Degradation Analysis in Earth Engine

Apr 2020

- Used X-Array chunks of Landsat 7 data to build NDVI Random Forest Classifier in sklearn.
- Developed timeseries Random Forest model in Google Earth Engine using JS to distinguish forest loss area.

Political Affiliation Analysis using ML Classifiers

Dec 2019

- Predicted political affiliation of politicians and popularity trends of 2020 presidential candidates using scraped tweets.
- Achieved 82% classification accuracy in python's sklearn using RNN, SVM, SGD and NB classifiers.

Tender: Restaurant Finding WebApp

Dec 2019

- Developed a web app using ReactJS to allow logged-in users quick access to local restaurant's info.
- Scraped restaurant information from Yelp and integrated into a user system.

Red Ventures Technical Case Competition

Nov 2018

- Presented a digital marketplace, using jQuery and Firebase, to maximize car sales.
- Lead team to first, by providing a user friendly interface and long-term plan to scale platform.