TRIVIKRAMA SAI P.T
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EDUCATION/ACADEMICS

University of North Carolina at Chapel Hill, NC Aug 2018-May 2022
Bachelor of Science in **Computer Science** (Primary Major) and **Statistics** (Secondary Major). Minor in **Mathematics**
Major GPA: 3.89; CGPA: 3.833; Dean's List: all semesters; GRE: 330 (165V/165Q/4.0AWA)

Relevant Coursework:
University Courses:
Data Structures, Algorithms and Analysis, Introduction to Machine Learning, Intro to Optimization, Internet services and Protocols, OOP and advanced concepts of java, Computer Organization, Intro to Probability, Linear Algebra, Statistical ML, Advanced Linear Models, Databases, Programming Language Concepts, Data analysis.

Additional Online Courses:
Machine Learning offered by Stanford; Deep Learning and Neural Nets; Hyper-parameter Tuning; Structuring an ML project; Convolutional Neural Networks; Sequence Models and NLP offered by Deeplearning.ai

TECHNICAL SKILLS

Java, Python, SQL , R, Pytorch,TensorFlow, Octave, MATLAB, C, Linux, Git, Tableau, Prolog, LISP

RESEARCH EXPERIENCE

UNC Computer Science Dept.|Undergraduate Research Assistant Oct 2019-Present

- Research assistantship to :
  - Study how **plagiarism detection** and code analysis can be applied to university programs to **help reduce the manual effort** required to grade coding assignments
  - Build an **educational machine learning software** that aids students with assignments by **detecting their proficiency levels and providing teaching assistance** (hints) as required to help grasp concepts on the go. This **saves a large amount of time** for the students, Professors and Teaching Assistants (TA)

WORK EXPERIENCE

Qikpod|Android app development Intern|Bangalore,India Jul-Sep 2017

- Created an **Android Application** that simulates the interface for smart lockers that are used for secure deliveries of e-commerce packages
- Used **XML** and **Android studio (Java)** to create a virtual interface to enhance the security of smart lockers through digital verification of passcodes to minimize manual labor required for management of locker spaces

CODING EXPERIENCE/PROJECTS

Machine Learning Projects

- Built a **Melanoma Detection** model using **Convolutional Neural Networks** and **SVM** on **pytorch**. The **deep learning** model out-performs the SVM and achieves an accuracy of **86.52%**
- Built a **Synonym Clusterer** using **spacy's** pre-trained **GLOVE** word-vectors to help me memorize words for the GRE exam. As a result of the model, I was able to learn **840 words** in under **12 days**
- Built a **Neural Machine Translator** using the attention model to translate human readable dates to machine readable dates (YYYY-MM-DD) which can help reduce the amount of manual effort required for data processing
- Used a **pre-trained CNN** to build a **face verification and recognition** program with applications in enhancing security
- Built a **Jazz Music Generator** using LSTM layers and a sampling/inference model on Keras which resulted in a 30 second audio clip of a unique machine generated jazz beat

EXTRA CURRICULAR ACTIVITIES

CADS- Carolina Analytics and Data Science, Active member Aug 2018-Present

Annual Carolina Data Challenge: Sept 2018, Oct 2019
- **Hackathon 1:** Used **Python** and **Tableau visualizations** to analyze leading causes of death in the US by time & location
- **Hackathon 2:** Used **Python's folium** to plot geo-data and implemented a **K-means clustering algorithm** to find clusters of crime locations in and around the UNC campus at Chapel Hill. Discovered that more crimes were committed near residential areas and explained the increase in the rate of crimes from 2010-2016 by analyzing the rising income inequality among residents of Chapel Hill