Nikhil Vytla

nikhil-vytla.github.io | cnikhil.vytla@gmail.com
(669) 204-6198 | linkedin.com/in/nikhil-vytla

EDUCATION

UNC - CHAPEL HILL
B.S. in Computer Science
B.S. in Statistics and Analytics
Aug. 2018 - May 2021 (Expected)
Chapel Hill, NC
Chancellor's Carolina Scholar
(Merit-based Full-ride)
Honors Carolina
Cum. GPA: 3.7 / 4.0
Major GPA: 3.8 / 4.0

LYNBROOK HIGH SCHOOL
Grad. June 2018 | San Jose, CA
Cum. GPA 4.4 / 4.0

LINKS

: nikhil-vytla.github.io
: github.com/nikhil-vytla
: linkedin.com/in/nikhil-vytla
: ACM Lab
Live Projects:
MedicAi
Carolina Cupboard

COURSEWORK

UNDERGRADUATE
Completed:
Computer Organization
Data Structures
Discrete Structures
Linear Algebra
In Progress:
Artificial Intelligence
Algorithms and Analysis
Models of Lang. and Comp.
Computer Security

SKILLS

PROGRAMMING
Experienced:
Java • Python • JS/HTML/CSS • Git
MATLAB • Ruby on Rails • Jenkins
TensorFlow • Elastic Stack • SQL
Proficient:
React Native • Android • Flutter
React.js • Node.js • C# • Agile
Currently Experimenting:
C • Processing • Keras • R
Languages (Fluent):
English • Spanish • Telugu

EXPERIENCE

DEPT. OF DEFENSE | Data Research Intern
Aug. 2019 – Present | Washington, D.C.
- Researching **deep learning models** using **Python** and **Keras** for the Dense Urban Environment Team (DUET) Megacity Project to analyze megacity data and map, model, and identify critical nodes for DoD operations.

UNC SCHOOL OF MEDICINE | ML Research Assistant
Jul. 2019 – Present | Chapel Hill, NC
- Combining **Mask R-CNN** (**Keras and TensorFlow**) with novel tissue clearing and 3-D microscopy methods under Dr. Guorong Wu (ACM Lab) to visualize and identify cell segmentation in mice brains, attaining **>92%** accuracy.
- Optimizing and testing segmentation code in large audio-visual datasets and performing manual segmentation to generate network training data.

FIDELITY INVESTMENTS | Software Engineering Intern
May 2019 - Aug. 2019 | Durham, NC
- Created Lightweight Container-based RESTful API using **Java**, **Tableau**, and **SQL** for data metrics tracking **30MM+** customers' transactions at **4-6 TPS**.
- Developed analytics dashboard using **Splunk API** to measure efficiency of multiple high-throughput core APIs, optimizing pipeline by **80%**.
- Applied reinforcement learning w/**Keras** (DQN) to predict transaction behavior.

ONCLASS.ORG | Co-Founder & Director of Operations
Mar. 2017 - Present | San Jose, CA
- Developed interactive, user-driven web app with **JS**, **HTML5**, and **CSS3** for 501(c)(3) **K-12 educational technology** nonprofit Onclass.
- Launched VR curriculum using **C#**, **Unity**, and **Google Daydream View** and implemented reading web app, online whiteboard, and video viewer with **JS**, increasing local school-district literacy rates by **70%**.
- **22,200+** unique students reached through physical and virtual tutoring partnerships with the City of San Jose and **Stanford d.school**.

SELECTED PROJECTS

OCRCC MOBILE APP | React Native, Android Studio
Jun. 2019 – Present
Currently developing a mobile **React Native** app for the Orange County Rape Crisis Center and sexual assault survivors as a **Project Manager** for CS+Social Good.

DEVMATCH | Ruby, Javascript, HTML5, CSS3/Sass
Feb. 2018 - Sep. 2018
Built DevMatch, a responsive Software as a Service (SaaS) web app utilizing **Rails**, **Heroku**, **Bootstrap**, **AWS**, **PostgreSQL**, and the **Stripe API** to create a "freemium" multi-tier social network for developers and entrepreneurs.

ACTIVITIES & AWARDS

2019	International	Forbes U30 Scholar, X-Force Fellow, & Google DSC Lead
2019	Research Grant	Vibration-Based Gait Restraining Device ($10,000)
2019	National	Director, HackNC & Director, Institute of Politics
2019	Finalist	Triangle Health Innovation Challenge (Top 5)
2018	Scholarship	Chancellor's Carolina Scholar (Top <1% of all UNC students)