

Nikhil Vytla

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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](https://github.com/nikhil-vytla)

 github.com/nikhil-vytla

 [linkedin.com/in/nikhil-vytla](https://www.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 • Tableau

TensorFlow • Elasticsearch • SQL

Proficient:

React Native • Android • Flutter

React.js • Node.js • Unity3D/C#

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

Aug. 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 Under 30 Scholar & NSIN X-Force Fellow
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)