ADITYA NATARAJAN

(929) 413-0143 | Apt 3E, 184 Claremont Avenue, New York, NY 10027
an2867@columbia.edu | www.linkedin.com/in/adinat | adinat.github.io

EDUCATION

Columbia University — New York, NY
Master of Science, Computer Science (Machine Learning track) — Aug 2018 - Dec 2019 (expected)
Current coursework: Algorithms, Machine Learning, Databases

College of Engineering Guindy, **Anna University** — Chennai, IN
Bachelor of Engineering, Computer Science and Engineering (with Honors) — May 2018
GPA: 8.98/10 (WES Conversion US GPA: 3.92/4.00)
Coursework: Algorithms, Artificial Intelligence, Data Structures, Data Mining, Probability & Queuing Theory

SKILLS

- **Programming Languages**: C, C++, Python, Java, PHP
- **Markup Languages**: HTML, LaTeX
- **Tools:** Git, Octave/MATLAB, MySQL

EXPERIENCE

College of Engineering Guindy, Anna University — Chennai, IN
Research Intern — May 2017 - Aug 2017
- Implemented deep learning strategies to predict Seven-Point stencil and Lattice Boltzmann Method iteration values using window & iteration-lookahead approaches with over 95% accuracy
- Published at the *10th IEEE High Performance Computing Student Research Symposium*

Indian Institute of Science — Bangalore, IN
Research Intern — May 2016 - Jul 2016
- Architected Convolutional Neural Networks for predicting image depth maps using multi-view data
- Designed deep learning architectures for Computer Vision tasks and to model Neural Turing Machines

PROJECTS

Video Editing Using Generative Adversarial Networks — Python, TensorFlow
- Built a frame-by-frame video editing system using Deep Convolutional Generative Adversarial Networks
- Implemented stylistic colorization and object substitution translations with over 90% color accuracy

Blind Guidance and Road Assistance System — RaspberryPi, OpenCV, Python, JavaScript
- Designed a smart-cap wearable for visual assistance using Constrained Local Models for face tracking & emotion detection and text-to-speech modules for road sign identification
- *Awarded 2nd place in Microsoft's Code.Fun.Do Hackathon*

Gesture Controlled Bot — RaspberryPi, OpenCV, Python, Microsoft Azure
- Designed a fully functional gesture-controlled bot on Raspberry Pi
- Implemented the Convex-Hull algorithm for hand gesture recognition using OpenCV
- Utilized Microsoft Cognitive Services Computer Vision API for character recognition and processing

Language Modeling using Recurrent Neural Networks — Python, Keras, Android Studio, Flask
- Designed and trained LSTM Recurrent Networks to mimic and generate literary works of different authors
- Built a content-on-request mobile application to retrieve and present results

LEADERSHIP EXPERIENCE

- **Membership Chair**, Association for Computing Machinery - Anna University — May 2017 - May 2018
- **Executive Editor**, The Guindy Times (College Magazine) — Apr 2017 - May 2018
- **Director**, Quizzers Anonymous (College Quiz Club) — Apr 2016 - Jul 2017

HONORS

- Published in *The Deccan Herald* (Daily readership: 450,000)
- Eligible for the CBSE Inspire Scholarship, for finishing in top 1% of 930,000 grade 12 students
- Awarded the CBSE Certificate of Merit, for finishing in top 0.1% of 1,300,000 grade 10 students