Nithin Raghavan

(678) 200-5839
rnithin@berkeley.edu
rnithin1 (Github)
linkedin.com/in/nithinraghavan

EDUCATION

University of California, Berkeley (Class of 2020)　　　　*August 2017 – present*
Computer Science *Bachelor of Arts*, Applied Mathematics *Bachelor of Arts*　　　　(*GPA: 3.687*)

- CS61B: Data Structures
- CS170: Efficient Algorithms
- EE127: Optimization Models and Applications
- Blockchain for Developers
- Math 126: Partial Differential Equations
- CS70: Discrete Maths and Probability

Georgia Institute of Technology　　　　*August 2015 – May 2017*
Courses Taken while in High School

- Linear Algebra
- Multivariable Calculus
- Applied Combinatorics
- Number Theory and Cryptography

Awards: Exploravision National Contest　　　　*2016*
Wrote a paper proposing blockchain's potential link to autonomous vehicles, and won honorable mention.

EXPERIENCE

RISE Lab, UC Berkeley　　　　*June 2018 – present*
Working on data visualization for Cirrus, a serverless machine learning framework with logistic regression as a primitive. Currently utilizes virtual machines, but working towards using AWS Lambdas for tasks such as efficiently optimizing hyperparameters.

IBM Almaden Research Center, Machine Learning Laboratory　　　　*July 2017 – August 2017*
Used Tensorflow and Keras to create artifical neural networks implementing the bag-of-words representation in order to analyze visual reasoning abilities on the CLEVR dataset, which encouraged complex reasoning in response to sophisticated English questions. Included sequence autoencoders, CNNs and LSTMs.

Georgia Institute of Technology School of Aerospace Engineering　　　　*September 2016 – May 2017*
Helped research the development of high-bandwidth, high-efficiency methods of energy transfer using millimeter waves, involving proposed circuits which have the potential to increase efficiency of wireless energy transfer up to 90%. Shadowed professors and graduate students working on wind tunnels.

Georgia Institute of Technology School of Physics　　　　*May 2016 – July 2016*
Shadowed professors and graduate students researching the potential impacts of the September 2015 LIGO sighting of gravitational waves. Worked with the Einstein toolkit to model relativistic astrophysical phenomena.

PROJECTS

Resource-Provisioning GPU Server　　　　*December 2017 – present*
Helped develop, and currently maintain, a program and Python-based shell to automate on-demand request processing and resource provisioning in a GPU + CPU cluster within the EECS department for UC Berkeley use. Uses Slurm for cluster management, and deploys tasks in Docker containers.

SKILLS

Frameworks/Softwares: Numpy, Scipy, Pytorch, Git, Unity3D, Docker, Slurm, Ethereum VM, ta-lib
Programming Languages: Python, Java, C, C++, C#, CLisp, Bash, LaTeX, SQL, JavaScript, Solidity
Operating Systems: Unix-like systems (Linux, FreeBSD, Mac OS X), Windows
Certifications: Android Development (University of Maryland through Coursera)
Languages: English, Spanish, Tamil