NEAL PATEL

np5dr@virginia.edu   (804) 835-7696   linkedin.com/in/nealpatel50   github.com/nealpatel50

EDUCATION

University of Virginia, GPA: 3.84 / 4   December 2020
- Double Major in B.A. Computer Science and B.A. Statistics
- Minor in Data Science

WORK EXPERIENCE

Amazon Web Services – *Software Development Engineer Intern*   May 2020 – August 2020
- Designed and developed a cloud-native comments feed for a website used at every AWS conference
- Implemented full stack feature with live UI updates, automated deployments, and efficient data fetching
- Stack: ReactJS, GraphQL, Go, AWS CloudFormation, AppSync, API Gateway, Lambda, DynamoDB

UVA Computer Science Department – *Head Teaching Assistant*   August 2019 – December 2020
- Teach programming labs and hold office hours in data structures and algorithms course taught in C++

RESEARCH EXPERIENCE

UVA Information Security Lab – *Research Assistant*   May 2019 – May 2020
- Developed detection algorithm for observation-based attacks in field of deep reinforcement learning
- Achieved 95% accuracy in detecting adversarial attacks in Atari game environments using TensorFlow
- Submitted research paper to the 5th IEEE European Symposium on Security and Privacy Conference

National Science Foundation Research Experience – *Research Fellow*   May 2018 – August 2018
- Researched and implemented an application of a Mask Region-based Convolutional Neural Network using TensorFlow and improved brain tumor classification accuracy from 78% to 90% in MRI scans
- Published research paper and presented project at the 50th Biomedical Engineering Society Conference

PROJECTS

Stitch Share – *Lead Developer*   January 2020 – May 2020
- Created a multitiered, containerized, scalable clothing rental website with Elasticsearch and load balancing
- Stack: Python, Django, MySQL, Kafka, Docker, and Spark

Quick Workout – *Founder* – https://assistant.google.com/services/a/uid/0000007ddbff9867   May 2019 – Present
- Developed a Google Home Action featuring a guided body workout averaging ~1,000 monthly active users
- Featured as a top fitness Action on CNET: https://cnet.co/39yH17H

ACTIVITIES

theCourseForum – *Software Engineer* – https://thecourseforum.com/   March 2019 – August 2020
- theCourseForum is an online community for sharing academic experiences with 10,000+ monthly users
- Migrated codebase to Django and containerized website in collaboration with 5 infrastructure engineers
- Stack: Python, Django, MySQL, ReactJS, and Docker

HooHacks Team – *Co-Chair, Hacker Experience*   October 2018 – December 2020
- Led a committee to organize and execute the premier annual UVA hackathon with 700+ participants
- Transformed it into a virtual hackathon with $55,000 in funding and 140+ projects due to COVID-19

HONORS

Kleiner Perkins Fellows Program - Finalist   November 2019
UVA Transitional Care Hospital – Volunteer (150+ hours)   September 2017 – May 2019
APT Puzzle Tournament Building Challenge Winner   April 2018 and 2019
Capital One Labs – Software Engineer Summiteer   May 2018