Nikhil Dhanda

nikhil4596@gmail.com; +1(832)-859-0660; LinkedIn: https://www.linkedin.com/in/nikhil-dhanda/; GitHub: https://github.com/nikhil4596;

Education

Georgia Institute of Technology — August 2014 – December 2018

Bachelor of Science in Computer Science with a concentration in **Intelligence, Info Internetworks** and **Media**
GPA: **3.75**, Major GPA: **3.86**
Important Courses: Machine Learning, Game AI, Data Mining, Intro to Robotics, Info Visualization , Data Structures, Algorithms, Computer Graphics
Study Abroad: Georgia Tech Lorraine, Metz, France (Fall 2016)

Work Experience

College of Computing at Georgia Tech – Tutor — January 2017 – Present

Tutoring students on Computer Science courses such as Data Structures, Algorithms, Computer Architecture, Object Oriented Programming etc.

Dell Secureworks – Software Development Intern — May 2016 – July 2016

QueryAnalytics **–** Worked on a solo project on data analytics of the big data received from the security tool and wrote bash scripts to deploy it on the server during the summer co-op term using Java, JavaScript, PHP, SQL, Linux, AngularJS, Bootstrap, HTML and CSS

Dell Secureworks – Software Development Intern — August 2015 – December 2015

Worked on a team project creating a web portal for the security tool in Java, JavaScript, Maven and performed Junit and automation testing

Haryana State Electronics Development Corporation - Software Development Educator — May 2014 – July 2014

Worked on projects and mentored high school students in Java, JSP and JavaScript

Research Experience

Infant Behavioral Imaging – Deep Learning — May 2017 – Present

Undergraduate Research under Dr. Jim Rehg. Working on analyzing an infant's behavior using Computer Vision algorithms on videos of infants interacting with objects and using deep learning to create a Convolutional Neural Network model to replicate this behavior.

Configurable Computing & Embedded Systems (VIP) – Computer Vision — January 2017 – Present

Working on Embedded Vision, implementing pedestrian counting and tracking pedestrians' trajectories using Kalman Filter in a live stream from street cameras placed on various locations on North Avenue, Midtown Atlanta through OpenCV library.

Network Security and Cryptography — August 2016 – December 2016

Undergraduate Research under Dr. Paul Voss. Worked in Network Security, Linux Security. Designed a lab that used Metasploit framework to exploit vulnerabilities and backdoors in the victim Linux server and gain root access to it in multiple ways.

Projects

Davis Challenge at CVPR 2017, Honolulu, Hawaii (4th Place) - Link to Paper http://davischallenge.org/challenge2017/index.html — June 2017

Was part of the GaTech-Oregon State team that received 4th place in the Davis Challenge for video segmentation at CVPR 2017, the premier annual Computer Vision conference. Used various Computer Vision libraries to generate object proposals and worked on refining the proposals for the Davis video frames.

Image Recognition using Convolutional Neural Network - Link to Paper https://github.com/nikhil4596/ConvolutionalNeuralNetwork — July 2017

Coded a Convolutional Neural Network Model using TensorFlow and analyzed the model's performance using different configurations and dimensionality reduction algorithms. Wrote a NIPS Style paper on all the theory, experiments and our findings.

Energy Use and GDP Growth Info Viz Project - Link to Video https://github.com/nikhil4596/Energy-Use-and-GDP-Growth — August 2017

Created Data Visualization Group Project aiming to disprove the public opinion that increase in Alternative Energy use leads to lower Economic Growth of a Country. Used D3.js Javascript library and Twitter Bootstrap to create multiple data visualization views for data comparison and analysis.

Musivision – Junction 2016 (Finland Hackathon) – https://github.com/nikhil4596/Musivision — November 2016

A music player web app, built using JavaScript, that uses Microsoft's facial recognition API to analyze the users' emotion and suggests the song the users would like to listen to in their current mood/emotional state using Deezer's Sound API.

CleanWater - https://nikhil4596.github.io/CleanWater/ — April 2017

A Web App made with JavaScript and Twitter Bootstrap for finding clean drinking water and reporting on testing results. Loosely based on the NASA Challenge - https://2015.spaceappschallenge.org/challenge/clean-water-mapping/ .

Skills, Interests and Leadership

Java, Python, Linux, JavaScript, TensorFlow, Django, AngularJS, C, SQL, Bootstrap, HTML, CSS, Subversion, GitHub, Assembly Language, Mockito, JavaFx, Agile Scrum. **Interests**: Machine Learning, Computer Vision, Data Mining, Cryptography, Web Development, Networking, Soccer, Poetry. **Languages:** English, Hindi, French (Intermediate) **Leadership:** SAA Leadership (International Liaison), Global Jackets (Leadership Board), UISA Outreach Committee