# Dat Thanh Nguyen

(408) 646 – 9337 tdat.nguyen93@gmail.com https://github.com/dat-ai

# **EMPLOYMENT**

# NSF Researcher North Carolina A&T University

May 2016 - August 2016

- REU Program: Engineering Modeling and Computation Research
- Improved Infrared image quality by implementing Thermography Signal Reconstruction Algorithm on MatLab.

# **IT Support Analyst**

#### **Genomic Health Inc.**

May 2014 - September 2015

- Performed hardware repair and maintenance.
- Solved emergency IT-related problems and assisted employees on technical issues.

## **Lab Technician Assistant**

## **CompTechS Program**

January 2014 - May 2014

- Recycled hundreds of old computers/laptops to donate to low-income students.
- Learned standard procedures in Laboratory Environment.

### **EDUCATION**

# De Anza Community College

### Computer Engineering, B.S.

Fall 2013 - Current

· Relevant Coursework:

Data Structures (C++)	Α	Introduction to x86 Assembly Programming	Α
Advanced C++ Programming	A+	Object-Methodology Programming in Python	Α
Introduction to UNIX/LINUX Programming	А	Object-Oriented Analysis and Design	A-

# **PERSONAL PROJECTS**

• Autonomous 1/10th Race Car

https://github.com/dat-ai/jetson-car

C++/C/Python/ROS

Python/TensorFlow

- Implemented a steering model to race in a small track using Deep Net and ROS as an interface.
- Joined <u>DIYRoboCar</u> group to compete and learn from other enthusiasts.

#### Traffic Sign Classifier

https://github.com/dat-ai/traffic-sign-classifier

- Achieved 97.83% Accuracy on Germany Traffic Sign Dataset.
- Designed a custom CNN inspired by VGG-16 CNN.

#### Behavioral Cloning

https://github.com/dat-ai/behavioral-cloning

Python/Keras

- Built a model combined of LSTM RNN and ResNet Pre-Activation CNN to learn my learning behavior.
- Trained the car to drive successfully in a simulator.

### PROFESSIONAL DEVELOPMENT

### **Self-Driving Car Engineer Nano-degree**

Udacity.com

November, 2016 - Current

• Learned about Deep Learning, Computer Vision and Core Robotic Functions for autonomous vehicle system.

## **Self-Taught Online Courses**

CS23N: Convolutional Neural Networks for Visual Recognition MIT 6.S094 Deep Learning for Self-Driving Cars

# **EXTRA-CURRICULAR ACTIVITES**

Private Math Tutor

September, 2016 - Current

- Helped freshman understand core concepts in Algebra, Pre-Calculus and Calculus.

#### Teaching Assistance Volunteer

September, 2016 – Current

- Helped new Computer Science students familiar to Data Structures and Programming in C++

### LANGUAGES & TECHNOLOGIES

- Programming languages: C++/C, Python, HTML/CSS
- Tools: TensorFlow, Keras, Robotic Operating System(ROS), OpenCV