Leonardo Tang

Software Engineer

Email: leonardodtang@berkeley.edu
Phone: (678) 708-5220
GitHub: github.com/leonardodtang
LinkedIn: linkedin.com/in/leonardodtang

EDUCATION

University of California, Berkeley | Berkeley, CA **Expected May 2020**
B.S. Electrical Engineering and Computer Science **GPA: 3.65**
Courses: Data Structures/Algorithms, Functional Programming, Information Devices/Systems, Linear Algebra, Discrete Math/Probability, Efficient Algorithms, Number Theory/Cryptography, Multivariable Calculus, Electricity/Magnetism

SKILLS

Languages: Python, Java, Scheme, SQL
Libraries/Programs: Tensorflow, Caffe, Keras, Git, NumPy, PRoNTo, SPM12, ImageJ, Bash, LaTeX

EXPERIENCE

Gyrfalcon Technology Inc | Milpitas, CA **June 2018 - August 2018**
Software Engineering Intern
- Worked closely with full-time employees on implementation of traffic light detection network for a client.
- Evaluation of various neural networks including YOLOv3, SSD, Mask-RCNN, VGG16, ResNet50, ResNet101.
- Modified Faster-RCNN network to fit client dataset, hyperparameters experimentation in Tensorflow and PyCaffe.
- Wrote Python scripts for data augmentation, input processing, folder restructuring, and dataset conversion (XML, JSON, CSV).

UC Berkeley EECS Department | Berkeley, CA **August 2018 – Present**
CS 61B (Data Structures/Programming Methodology) Academic Intern: Fall 2018
- Assisted in developing students' abilities in using data-structures and object-orientated design to implement several projects, such as filling a board with symmetric regions, and aided in weekly lab sessions and office hours.

Emory University Department of Radiology and Imaging Sciences | Atlanta, GA **August 2016 – June 2017**
Intern
- Tang, L.; Wang, S.; Wang; L., Mao, H. (2017). Identifying Radiation Induced Brain Abnormalities in Adult Survivors of Pediatric Brain Tumor from "Normal-Appearing" MRI Using a Machine Learning Approach. *RSNA 2017 Annual Meeting.* http://archive.rsna.org/2017/17039958.pdf
- Worked on developing a brain age prediction model (first with PRoNTo, then Keras) using T1 MRI images, focusing on the relationship between predicted brain age and chronological brain age in brain tumor survivors with rTBI (repeat traumatic brain injury).

PROJECTS

U-Net and V-net Keras Implementation **June 2018 - Present**
- https://github.com/leonardodtang/convnet-medical-imaging
- Intended for image segmentation of primarily MRI brain images among other imaging modalities.
- 2D U-Net for familiarity, 3D V-Net to improve on 2D approaches since most medical data consists of 3D volumes.

Mock Paint **November 2018 - Present**
- A re-creation of the classic paint tool. Started as a hackathon project at CalHacks 2018
- https://githubcom/leonardodtang/calhacks5.0

Tile-Based Dungeon Crawler **February 2018 – March 2018**
- Implemented tile-based dungeon crawler game with randomized world building and NPC movement in Java.
- Main objective: Collect shrooms by navigating rooms and hallways while avoiding touch damage from enemies.
- Video Demo: https://www.youtube.com/watch?v=2coMiCVwCBs&t=1s

LEADERSHIP

English Teacher | New Taipei, Taiwan **July 2017**
AID Summer (Youth English Teaching Volunteer Service Program in Taiwan)
- Taught English to Taiwanese junior high students
- Drafted new lesson content and structure on short notice after initial assessment of students' English proficiency did not match information provided.

MISCELLANEOUS ACTIVITIES

Cellist
- Three time performer at Carnegie Hall.
- Participant in numerous quartets and trios, UC Berkeley Symphony Orchestra, and Celli@Berkeley.
- Performed in paid gigs such as weddings, private residences, etc., as well as volunteer performances at hospitals, senior homes, etc.