John **Dang**

Computer Science Student · Software Engineer · AI Researcher

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Education

University of California, Los Angeles (UCLA)

Los Angeles, CA

B.S. in Computer Science, GPA: 3.8 *Sep. 2018 - Jun. 2022*

- Achievement Scholarship Recipient, Association for Computing Machinery (AI Projects Officer), Upsilon Pi Epsilon (CS Honor Society)
- Relevant Coursework: Machine Learning, Computer Vision, Data Mining, Algorithms and Complexity, Data Structures and Algorithms, Object-Oriented Programming, Software Construction, Probability Theory, Linear Algebra, Multivariate Calculus, Discrete Structures, Statistical Reasoning, Research, Computer Organization

Work Experience

Center for Vision Cognition Learning and Autonomy (VCLA)

UCLA CS and Statistics Deparments

Undergraduate Student Researcher; Principal Investigator: Professor Song-Chun Zhu *May. 2019 - Present*

- Researching causal, transfer, and reinforcement learning. Working jointly at International Center for AI and Robot Autonomy Inc. (CARA).
- Developing VRGym, an AI research platform for training and evalauting agents in 3D environments built on on Unreal Engine (C++ and Python).
- Desgined and implemented automatic structured, stochastic scene generation including integration with Shapenet and Partnet.
- Integrating Pyro, a Pytorch-based probabilistic programming language into VRGym for probabilistic inference and learning.
- Created demo presented by Professor Song-Chun Zhu during part of an invited talk at World AI Conference 2019 in Shanghai.

Sike AI

Los Angeles, CA

Deep Learning Engineer *Oct. 2018 - Present*

- Created deep learning model for accurate five-factor OCEAN personality trait extraction from text for helping client companies' employee onboarding process. Clients include Heal, Wistmo, Saffron,and more. Working on extracting additional psychometrics from audio and video.
- Desgined and implemented data infrastructure, including data storage on AWS Simple Storage Service and AWS Relational Database Service (MySQL), multi-GPU distributed Tensorflow model training on AWS Elastic Compute Cloud, and deployment on AWS Elastic Beanstalk.
- Sike AI is backed by the StartupUCLA Acclerator and Anderson Venture Accelerator

Howard Hughes Medical Institue (HHMI) / Ozcan Research Group (ORG)

UCLA ECE Department

Machine Learning Researcher; Principal Investigator: Professor Aydogan Ozcan *Oct. 2018 - Jun. 2019*

- Developed deep learning system for quick, mobile, and accurate protein particle analysis of blood samples for disease diagnosis in Tensorflow.
- Custom Convolutional Neural Network system achieved tenfold improvement over traditional methods in efficiency on embedded devices.
- Presented work at Howard Hughes Medical Institute Day Undergraduate Research Conference. Poster here: www.johndang.me/ozcan

Logos News LLC.

Los Angeles, CA

Software Engineering Intern *Oct. 2018 - Dec. 2018*

- Developed iOS app in Swift for diverse, crowd-sourced news platfrom. Performed various app and database bug fixes and refractoring.
- Implemented article text highlighting feature enabling text-specific social interaction, discussion, and bias ratings.
- Redesigned Firebase database structure and wrote new Google Cloud Functions for faster data processing and app loading times.

Projects

Sincerely, AI

Developer

- Trained Tensorflow deep learning model for detection of insincere questions using transfer learning. Achieved 96% accuracy and 0.7 F1-score on Quora Insincere Questions Dataset (over 1.3 Million data samples). Built at SB Hacks 2019.
- Deployed model on Python Django web server for use with Chrome Extension that determines sincerity of highlighted text on webpage.

Perspective

Developer

- Developed Java web app that allows user to read two news articles side by side that are likely to differ in perspective on the user's search query.
- Integrated Bing News Search API for article retrieval and scraped web for bias data for determining likelihood of articles differing in perspective.
- Winner of Most Useful Hack at EV Hacks 2018.

Skills

Programming Python, C++, C, Java, Javascript, Matlab, HTML, CSS, Bash, Octave, Swift, SQL

Technologies Git, Github, Tensorflow, Pytorch, Keras, OpenAI Gym, Amazon Web Services, Firebase, Unreal Engine, LaTeX

Languages English, Vietnamese