

Junshen Kevin Chen

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Stanford University

M.S. Computer Science, 2019 - 2021

- Specialization in artificial intelligence (AI) and deep learning

University of California, San Diego

B.S. Computer Science, 2015 - 2019

- Magna cum laude, major GPA 4.0



Facebook Reality Labs

Software Intern, 2020

- Worked on improving Detectron2Go family of models for real-time entity detection, segmentation, and tracking with PyTorch
- Implemented various papers to enhance temporal consistency and feature robustness of person segmentation in Python
- Designed and implemented pipeline to build, annotate, and load massive datasets of videos and images for model-training

Facebook Reality Labs

Software Intern, 2019

- Worked on improving performance of c++ models for human pose estimation with inverse kinematics (IK) algorithms
- Built full-feature playback tool to render animate wireframes to visualize model output and metrics with React
- Improved data loading infrastructure to facilitate model training and tuning in c++

Google Display Ads

Software Intern, 2018

- Designed and implemented data pipelining infrastructure for high-performance ad-serving in c++
- Built a producer-consumer framework on top of vanilla gRPC, to enable easy entity sharing across the network serving stack

University of California, San Diego

Teaching Assistant, 2017-2019

- Managed a TA group as head TA, overseeing course logistics and assisting professor with curriculum design
- Taught sections, held office hours, designed programming assignments for introductory computer science courses
- Designed and built a full-feature autograding framework that integrates with Gradescope



DeepCube: Video Sequential Action Recognition

Stanford CS231N Project, 2020

- Designed and built data collection pipeline to collect and annotation 20K+ video clips of Rubik's cube moves
- Designed R3D model to achieve high accuracy in multi-class video classification
- Proposed and implemented 3D-LRCN model with CTC loss for video stream action sequence recognition

Motion-Based Handwriting Recognition

Stanford CS229 Best Poster, CS230 Best Project, 2020

- Designed and built a rotation and acceleration tracking stylus, and collected a dataset of handwritten letters and words
- Using LSTM with autoencoder to design a model that achieves 87% accuracy in single-letter classification
- Designed sequence segmentation strategy based on HMM, to enable word reconstruction using single-letter classifier

Related Academic Papers with Siamese BERT

Stanford CS224U Project, 2020

- Explored various strategies to fine-tune BERT in a Siamese structure to encode contents of academic papers
- Built a recommender system to rank and suggest related papers based on a given text abstract as query

On-Topic Text Generation with BERT and GPT-2

Stanford CS224N Project, 2020

- Proposed various strategies to generate text with GPT-2 to adhere to topic encoded by BERT
- Designed experiments and evaluation techniques to study performance against state-of-the-art approaches

Game Agents for Paper.io

Stanford CS221 Project, 2019

- Proposed and implemented various agents to play the imperfect information, zero-sum adversarial game
- Produced a TD-learning agent that self-learns and consistently outperforms human players

Global App Store Analytics

Honorable Mention Award, Teradata Analytics Challenge, 2019

- Coached a team of high school students and taught various data analytic techniques and tools, including Tableau and Jupyter
- Scraped an original massive dataset of app distribution platforms from multiple regions, including Google Play and App Store



Languages Python, C++, C, Java, PHP, Javascript, HTML, CSS, SPARC assembly, ARM assembly

Frameworks PyTorch, Caffe2, TensorFlow, Keras, OpenCV, React, gRPC, Selenium

Updated Aug. 2020