Corey Hu

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EXPERIENCE

NVIDIA: June 2020 – Present
Deep Learning Engineer

- Oversaw end-to-end development and deployment of deep learning models for AI-assisted chip design
- Trained a transformer model to identify root crashes and errors from logfiles with 94% line classification accuracy
- Deployed a clustering model to recommend configuration improvements and shared bug fixes using 6 years of historical run data
- Created a transformer model for gate sizing with 98% accuracy across 250k logic paths and exponential runtime improvements against traditional EDA tools
- Founded and co-chairing NVIDIA's first-ever Asian & Pacific Islander Community, organizing company-wide events and campaigns around cultural education, advocacy, and professional development for over 200 members

Qualcomm Research: May 2019 – August 2019
Computer Vision Systems Intern

- Developed GLANCE, a low-power computer vision sensor for object detection with ensemble cascading classifiers in a low-resolution and low-framerate environment
- Improved detection accuracy by 8% by designing a post-processing step involving dual IIR filters and stratification
- Developed an optimizer for tuning filtering parameters using analytical solvers on convex optimization problems that could be deployed and run offline

Berkeley Artificial Intelligence Research (BAIR) Lab: January 2018 – May 2019
Undergraduate Researcher

- Worked on the AIKA project for automated data modeling via optimizing machine learning/deep learning pipelines and architectures to generalize to a breadth of datasets and applications
- Researched lifted neural network (LNN) frameworks and adaptive activation functions with Professor Laurent El Ghaoui

Tencent AI Lab: May 2018 – August 2018
Machine Learning Research Intern

- Developed a two-tower Mask-RCNN and ensemble U-Net model designed to be robust towards small datasets and different cell types for nuclei instance segmentation (30 training images with ~22,000 nuclear boundary annotations)
- Co-authored a manuscript (Generalized Nuclear Segmentation using a Deep Convolutional Neural Network Method) detailing our model architecture, training schedule, and results to be published in a scientific journal
- Model performance ranked 9th and 14th in the MICCAI MoNuSeg and Digital Pathology Challenges respectively

EDUCATION

University of California, Berkeley
Computer Science (2016 – 2020)

- Jacobs Institute of Design Innovation Certificate

PROJECTS

Urbanist Builder

- Wrote a custom pipeline script for building and testing raw glyphs file format into production-ready font files (for use in my open-source font project, Urbanist)

Whitespace

- Speech and presentation coaching app built using Bose AR SDK, Swift, and iOS Speech Recognition API

OCRcpt

- iOS app for OCR receipt recognition and bill splitting using XCode, Swift, Python, and the Google Vision API during the 36-hour Cal Hacks Hackathon

SKILLS

Python, TensorFlow, PyTorch, SciPy, OpenCV, React, Java, C++, HTML, CSS, SQL, JavaScript, git, Linux/Unix, AWS