Richard Chen

Undergraduate Student - University of California, Berkeley

@ richard.chen169@berkeley.edu +1 (301) 661-1933 Berkeley, California linkedin.com/in/richardchen169

Formal Education/Degree

BA in Computer Science and Physics

University of California, Berkeley

August 2017 – Ongoing Berkeley, CA

GPA: 3.71/4

Relevant Coursework: Machine Learning, Deep Neural Networks, Computer Vision and Computational Photography, Probability and Random Processes, Efficient Algorithms and Intractable Problems, Quantum Mechanics, Computational Color

Experience

Berkeley Artificial Intelligence Research (BAIR)

Undergraduate Researcher

January 2020 - Ongoing Berkeley, CA

- Implementing deep learning architectures and introducing symmetry constraints to improve facial landmark detection and facial intrinsics
- Advised by Professor Ren Ng and Cecilia Zhang

Lawrence Berkeley National Laboratory (LBNL)

Undergraduate Researcher

May 2018 - Ongoing Berkeley, CA

- Analyzed crystal efficiency on gamma ray spectrometer GRETINA using ROOT and C++
- Designing project to test deuteron cross-section interactions with Boron-10 and Boron-11

Rokid R-Lab

Computational Imaging Intern

May 2019 - August 2019 San Carlos, CA

- Implemented deep learning CNN for Super Resolution in camera optics to improve picture quality by 2x
- Created multi-frame Super Resolution with sub pixel registration using Fourier Transforms
- Designed forwarding image pipeline model of camera with mosaiced Bayer pattern

NBA Dallas Mavericks

Basketball Analyst Intern

January 2019 - May 2019 Dallas, TX

- Created data visualization tool for player shooting trends with Django and Pandas
- Built and deployed web application on AWS for data analytics team
- Employed statistical techniques to interpret trends in Dallas players eagle tracking data

Student Organizations

Immersive Semi-Autonomous Aerial Command System (ISAACS)

Radiation Visualization Product Manager

August 2019 - Ongoing

- Implemented real time radiation streaming onto Microsoft Hololens
- Supervised by Professor Kai Vetter and Professor Allen Yang in collaboration with Lawrence Berkeley National Laboratory

Honors and Publications

- Journal of Thermal Analysis and Calorimetry Publication Co-author 2019
  - "Sample Pattern and Temperature Distribution in Nanocalorimetry Measurements"
- 1st place in Probability and Random Processes class Final Project 2019
  - Designed AI to play out Settlers of Catan, top scorer in over 80 groups
- Regeneron Science Talent Search Competition (Formerly Intel STS), Semifinalist (2017)

Areas of Interest

- Machine Learning
- Computer Vision
- Big Data

Skills and Libraries

- Python
- Java
- Matlab
- Tensorflow
- Pytorch
- Pandas

Hobbies

- Basketball
- Photography