Giulio Zhou

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EDUCATION

UC BERKELEY
BA in Computer Science
Expected Dec 2016 | Berkeley, CA
Cum. GPA: 3.89 / 4.0
Major GPA: 3.97 / 4.0

COURSEWORK

Artificial Intelligence
Machine Learning
Computer Networking
Data Structures
Algorithms
Machine Architecture
Discrete Math
Probability Theory
Linear Algebra
Stochastic Processes
Operating Systems
Computer Vision
Database Systems

ABOUT ME

I am a fourth year Computer Science student with a passion for artificial intelligence and machine learning. In particular, I'm interested in building systems for unsupervised learning at scale and exploring the intersection between deep learning and traditional methods in vision and inference.

LINKS

Github: **giulio-zhou**
LinkedIn: **giuliozhou**

SKILLS

PROGRAMMING
Java • Python • Matlab • C/C++
HTML/CSS/JS •Caffe • Spark

WORKFLOW
Git • Vim • Unix • EC2
Trac • Gerrit • Eclipse

WORK EXPERIENCE

BERKELEY AI RESEARCH LAB
Feb 2015 - Present | Berkeley, CA

- Worked under Stuart Russell on sampling algorithms for Bayesian LOGic, an open-universe probabilistic modeling language
- Applied an online EM algorithm to solve a Gaussian mixture model for image segmentation in video sequences

AMPLAB
May 2016 - Present | Berkeley, CA

- Worked under Joseph Gonzalez on systems for online training and deployment of machine learning models
- Implemented a C++ RPC server for Vowpal Wabbit linear model predictions
- Investigated the use of contextual bandits for exploration and online learning

GOOGLE | Software Engineering Intern
May 2015 - August 2015 | Mountain View, CA

- Worked on Display Ad Automation Team to improve the quality of Native Ads
- Designed and built a backend pipeline for high-quality automated text-to-image matching for non-English display ads
- Developed quality visualization tools and deployed non-English Native Ads, doubling overall coverage

TEACHING EXPERIENCE

CS 61BL | Undergraduate Student Instructor
June 2016 - present | Berkeley, CA

- Led daily lab sections, created course material for the summer offering of the data structures and algorithms class

CS 61B | Undergraduate Student Instructor
Jan 2016 - May 2016 | Berkeley, CA

- Led weekly discussions, created course material for the 1200-student data structures and algorithms class

CS 170 | Course Reader
Aug 2015 - Dec 2015 | Berkeley, CA

- Graded exams and attended homework parties for the algorithms course

CS 61B | Tutor/Reader
Jan 2015 - May 2015 | Berkeley, CA

- Held office hours and taught a weekly supplementary section

PROJECTS

Image Artifact Removal Using Deep Learning (PyCaffe)

- Trained a deep convolutional neural network to remove JPEG artifacts

Computational Photography Projects (Python)

- Face/image morphing across pre-defined and automatically detected meshes
- Content-aware image resizing and object removal using seam carving
- Automatic panorama generation using adaptive feature point detection and RANSAC outlier elimination

Tour Into Picture (Android, OpenGL)

- Converts a 2D picture into a 3D tour using homography transformations