

Ziyi Chen

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EDUCATION

- **University of California, Santa Cruz** Santa Cruz, CA
Master of Science in Computer Science Sep. 2016 – Dec. 2017(*expected*)
 - **GPA:** Overall 4.00/4.00
 - **Major courses:** Algorithm Analysis, Image Processing and Computer Vision, Data Visualization, Computational Model of Discourse and Dialog, Programming Languages
- **College of Computer Science, Zhejiang University** Hangzhou, China
Bachelor of Engineering in Digital Media Technology Sep. 2012 – June. 2016
 - **GPA:** Overall: 3.82/4.00 Major: 3.94/4.00
 - **Major courses::** C Programming, Data Structure, Database System, Object-Oriented Programming, Operating System, Artificial Intelligence, Computer Graphics, Computer Game Programming

EXPERIENCE

- **Hangzhou Aika Co.** Hangzhou, China
Web Development Intern Mar 2016 - Apr 2016
 - **Font End:** Designed a web application using **AJAX** which allows users to control real world game progress via smartphones.
 - **Back End:** Built the back end service with **Node/Express** which receives commands from mobile phones and send signals to hardware.
- **State Key Lab of CAD&CG, Zhejiang University** Hangzhou, China
Research Assistant Mar 2016 - Jun 2016
 - **3D Rendering:** Implement an interactive high-performance 3D viewer based on **WebGL** that renders house and furniture in real time.
 - **Model Editor:** Built a 3D model editor with **JavaScript**. Users are allowed to add/remove components (furniture) into the 3D space. It also supports importing 3D components from CEMO(a 3D model format based on XML) files and exporting the whole model into common 3D formats.

PROJECTS

- **Twitter Clustering and Topic Modeling:** A pipeline for tweets preprocessing was built based on *NLTK*, *CMU Twitter NLP* and *scikit-learn*. KMeans, LDA, BTM were used for clustering and topic modeling. A lexicon normalization algorithm was implemented.
- **High Dynamic Range (HDR) Camera System:** A radiometric calibration based on *scikit-learn* was implemented to recover linear raw camera data. Three different algorithms were exploited to produce the combined image.
- **Raspberry Pi Car:** An Android app and a Raspberry Pi server software. Socket connection is established between two ends to achieve remote control. An *A** algorithm was implemented to find the shortest route and navigate.
- **Image Completion:** Implemented a paper from SIGGRAPH 2005 based on *OpenCV*. Given user specified structure lines, the algorithm removes the object that shields certain structure in the image. A dynamic programming algorithm and a belief propagation algorithm were used to complete line structure.

SKILLS

- **Programming Languages:** C/C++, C#, Java, JavaScript, HTML/CSS, Python, Haskell, SQL
- **Frameworks::** jQuery, Bootstrap, Node/Express, WebGL, OpenGL, OpenCV, Unity
- **Softwares::** Linux, Windows, Dreamweaver, Photoshop, Maya, Premiere