

TIMOTHY LIU

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EDUCATION

University of California at Berkeley **GPA: 3.290**
Plano West Senior High School **GPA: 4.416**

B.S. in Electrical Engineering and Computer Sciences
Graduation Date: May 2010

ENTREPRENEURIAL EXPERIENCE

Co-founder, CTO Fall 2010 – Present
simplynk

- **Focus:** iOS development, Android development, RoR, machine learning, algorithms (SVDs, PCA, EVDs)
- **Accomplishments:** simplynk iOS/Android application

Co-founder Fall 2006 – Spring 2008
Global Expertise Exchange

- **Focus:** what is a start-up?, agile development, V.C. presentations, Ruby on Rails based social network
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INDUSTRY EXPERIENCE

Scientific Applications Software Engineer Fall 2010 – Summer 2011

Jet Propulsion Laboratory – California Institute of Technology

- **Focus:** Multi-angle Imaging SpectroRadiometer (MISR: <http://www-misr.jpl.nasa.gov/>); processing algorithms
- **Responsibilities:** aerosol retrieval algorithms, georectification statistics, cloud fraction estimate optimization

Extreme Blue Technical Intern / Co-op Summer 2009 – Spring 2010

IBM – Almaden Research Center

- **Focus:** image processing, iPhone development, user interface, prototyping
 - **Accomplishments:** 4+ filed patent disclosures in field of image processing; breadcrumbs iPhone application
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RESEARCH EXPERIENCE

Research Assistant Fall 2009 – Spring 2010

U.C. Berkeley Video and Image Processing Lab

- **Focus:** computer vision techniques: SIFT features, homographies, image stitching, view interpolation
- **Accomplishments:** Liu, T.; Carlberg, M.; Chen, G.; Chen, J.; Kua, J.; Zakhor, A.; , "Indoor localization and visualization using a human-operated backpack system," *Indoor Positioning and Indoor Navigation (IPIN), 2010 International Conference on* , vol., no., pp.1-10, 15-17 Sept. 2010

Research Assistant Spring 2009 – Spring 2010

BeARING (Berkeley Applied Research on the Imaging of Neutrons and Gamma-rays)

- **Focus:** machine vision radiation detection: multiple object tracking to aid detection of radioactive sources
- **Accomplishments:** poster presentation at Annual Academic Research Initiative (ARI) Grantees Conference

Research Assistant Summer 2008

NASA: Langley Research Center

- **Focus:** robotics (autonomous rover), sensor integration, artificial intelligence
 - **Accomplishments:** software architecture of rover, integration of LIDAR, stereo cameras, embedded CPUs
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OPEN-ENDED PROJECTS & SKILLS

[Image Based Render] interactive 3D image rendering
[First Person Shooter] kinematics and cloth simulation
[Autonomous Vehicle] self-parking embedded system
[Facial Recognition] multi-threaded camera system

[Fluent Languages] Python, C/C++, Objective-C, Java
[Proficient Languages] shell, Ruby, MATLAB, TeX
[Web Development] RoR, SQL, JavaScript, HTML, CSS
[Systems/IDEs] Linux/Unix, Windows, Eclipse, Xcode

INTERESTS & ACTIVITIES

IEEE (Institute of Electrical and Electronics Engineers)