

Xiuhan Hu

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EDUCATION

COLUMBIA UNIVERSITY

M.S. IN COMPUTER SCIENCE
Dec 2015 | New York, NY
GPA: 4.0 / 4.3

PEKING UNIVERSITY

B.S. IN COMPUTER SCIENCE
DOUBLE MAJOR IN ECONOMICS
June 2014 | Beijing, China
Major GPA: 3.6 / 4.0

LINKS

Facebook:// [xiuhan.hu](#)
Github:// [huxiuhan](#)
LinkedIn:// [xiuhanhu](#)
Projects: <http://huxiuhan.com/projects/>

COURSEWORK

GRADUATE

Machine Learning
Computer Vision
Programming Language & Translators
Natural Language Processing
Visual Interfaces to Computer
Computational Aspects of Robotics

UNDERGRADUATE

Programming in C&C++
Computer Graphics
Design & Analysis of Algorithms
Introduction to Computer Systems
Signals & Systems
Pattern Recognition
Software Engineering
Database Systems
Digital Image Processing
Computational Perception
Linux Programming
The Brain & Cognitive Science

SKILLS

PROGRAMMING

Proficient:
Python • JavaScript • Rails • Matlab
Familiar:
C • C++ • HTML • CSS • Node.js •
PHP/Hack • Java • Git • Mercurial •
Objective-C • OpenCV • OpenNI • \LaTeX

EXPERIENCE

FACEBOOK | SOFTWARE ENGINEER INTERN

June 2015 - Aug 2015 | Menlo Park, CA

- Realtime Location Team, worked on Nearby Friends and its infrastructure.
- Designed formulas to adjust critical parameters and increase user impression and participation rate by more than 50%.
- Created several visualizing tools proved valuable for product decisions.

RESEARCH

PERCEPTION AND CONTROL OF SELF-DRIVING CAR

RESEARCH ASSISTANT AT PKU OMNI SMART SENSING LABORATORY

July 2012 – June 2014 | Beijing, China | Prof. Huijing Zhao

Implemented basic structures and algorithms for self-driving vehicles. Used sensors (lidar, camera) to perceive the context, locate the car and achieve certain position. Was honored best research from Peking University Young Scientists Symposium on Informatics.

SYSTEM FOR GUIDING THE USE OF ASTHMA INHALER

RESEARCH INTERN AT CMU LANGUAGE TECHNOLOGIES INSTITUTE

July 2013 – August 2013 | Pittsburgh, PA | Prof. Alexander G. Hauptmann

Designed a cognitive system for guiding the use of asthma inhaler. Implemented system can detect and judge the steps through machine learning on Kinect RGB-depth video and audio MFCC features.

PROJECTS

ASCII-ART DESCRIPTION LANGUAGE

April 2015 | Columbia University | System Integrator | Prof. Alfred Aho

Implemented a programming language for simplifying the creation of ASCII artwork. Created compiler frontend with ANTLR and translated source program into JavaScript program, which can render ASCII artwork on any browser.

SENSOR OVERLAY FOR GOOGLE MAPS

Oct 2014 | Columbia University | Individual project

Created a user interface for displaying information from the sensors as an overlay on Google Maps in real-time. Designed abstract sensor representation and auto clustering algorithm for sensors shown in different forms (points, circles or polygons). The JavaScript interface is connected to backend via a WebSocket connection.

WEIMING WORLD GAME SERVER

March 2013 | Peking University | Backend Leader

Weiming world is a mobile online game for introducing the campus life to freshman of Peking University with location based assistance. Built the backend server using Pomelo framework in Node.js, Redis and MongoDB.

PKU CAMPUS ACTIVITY PLATFORM

March 2012 | Peking University | One of two major developers

Built a social network website centered on campus activities tested by more than 30,000 users by Ruby on Rails and MySQL. Included several widely used features: profiles, bi-direction friends, like & dislike, groups and privileges, activities, pictures, albums, blogs, comments, search and realtime chatting.