

# Zhanyuan Huang

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## Education

**Northeastern University – Silicon Valley Campus (NEU)**, San Jose, CA 09/2019-Present

- ♦ Master of Science in **Computer Science**, **GPA: 3.6/4.0** Expected Graduation 05/2021
- ♦ Courses: Algorithms, Program Design Paradigm, Computer Systems, Database Systems, Software Engineering, Web Development, Mobile Application Development, Scalable Distributed Systems

**University of International Business and Economics (UIBE)**, Beijing, China 09/2015-06/2019

- ♦ Bachelor of Management in **Information Management and Information System**, **GPA: 88/100**
- ♦ Courses (GPA 4.0): Computer System, Computer Network, C++ Programming, Data Structure, Object-Oriented Programming, Discrete Mathematics, Matlab, Project Management for Software
- ♦ Awards: First-class Scholarship (Top 5% students), Research Scholarship (Top 1% students)

## Technical Knowledge

- ♦ **Languages & Systems:** Java, C/C++, C#, SQL, HTML/CSS, JavaScript, Python, Matlab, Linux, Mac OS
- ♦ **Frameworks & Others:** React, IntelliJ IDEA, Azure, Eclipse, Junit, Git, MySQL, Tensorflow

## Internship Experience

**Microsoft**, Suzhou, China 06/2020-08/2020

*Position: Software Engineer Intern*

- ♦ Responsible for the core development and feature update of O365 suite.
- ♦ Improved the integration of O365 suite and cloud service Azure.

## Research Experience

**MIT Computer Science & Artificial Intelligence Lab (CSAIL)**, Cambridge, MA 07/2018-08/2018

*Position: Undergraduate Research Assistant*

- ♦ Implemented the video-based fall detection for the seniors using Python, Tensorflow and Open CV on three public fall data sets (FDD, URFD, Multicam), more than 300K+ images
- ♦ Introduced the human post estimation (OpenPose) on fall detection field innovatively
- ♦ Conducted feature extraction and classification through CNN (VGG-16 Architecture) and two-stage SVM, achieved more than 80.9% recall rate for 300+ fall events

**Tsinghua University Intelligent Technology and Systems Lab(CSAI)**, Beijing, China 03/2018-06/2018

*Position: Undergraduate Research Assistant*

- ♦ Implemented 3D Object Detection with 3D Proposal Network & Region-based fusion network. Used python (Demo) and C++ on KITTI dataset including more than 24hrs urban road video.
- ♦ Projected the point cloud data to the Bird's Eye View (BEV) and Front View (FV), creatively combined them with stereo data to improve the resolution and detected small objects, like pedestrians and cyclists.
- ♦ Did experiments on different intersection over unions (IoUs) and gained 70%+ recall rate.

## Publications

- ♦ **Zhanyuan Huang**, Yang Liu, Yajun Fang, Berthold K.P. Horn, *Video-based Fall Detection for Seniors with Human Pose Estimation*, IEEE International Conference on Universal Village 2018, 10/2018 (6 cited)