

# XIN LI

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## EDUCATION BACKGROUND

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Lehigh University, Department of Computer Science and Engineering	08/18/2015 - 01/19/2020
<b>Ph.D. in Computer Science</b>	Overall GPA: 3.97/4.00
Peking University, School of Software and Microelectronics	09/01/2012 - 06/30/2015
<b>Master of Engineering in Software Engineering</b>	Overall GPA: 3.70/4.00
Qingdao Technological University, Shandong	09/01/2008 - 07/30/2012
<b>Bachelor of Engineering in Software Engineering</b>	Overall GPA: 85/100 Rank: 5/62

## RESEARCH INTERESTS

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Computer Vision, Deep Learning, Autonomous Driving, Software Engineering

## WORKING EXPERIENCE

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- Qualcomm Technologies, Inc., San Diego, CA, USA**  
[Full time, Senior Machine Learning Engineer] 10/01/2019–Present  
**Manager:** Dr. Yingyong Qi  
**Research Topic:** Semantic Segmentation, Action Recognition  
**Accomplishments:** (1) Developed a driver action recognition scheme for Qualcomm's driver monitoring system that was shown on the Consumer Electronics Show (CES) 2020 and the Conference on Computer Vision and Pattern Recognition (CVPR) 2020. (2) Developed schemes of Semantic Segmentation from images and videos for AI Camera Team.
- Samsung Research America Inc. (SRA), Mountain View, CA, USA**  
[Research Intern] 05/06/2019–08/16/2019  
**Mentor:** Dr. Hongxia Jin, Dawei Li  
**Research Topic:** Human Action Prediction from videos [**Paper submitted**]
- Qualcomm Technologies, Inc., San Diego, CA, USA**  
[Interim Engineering Intern] 05/21/2018–08/31/2018  
**Mentor:** Dr. Bolan Jiang, Dr. Shuai Zhang  
**Research Topic:** Convolutional Network Decomposition [**Paper published**]
- Qualcomm Technologies, Inc., San Diego, CA, USA**  
[Interim Engineering Intern] 05/22/2017–08/13/2017  
**Mentor:** Dr. Bolan Jiang  
**Research Topic:** Fast Object Detection on Mobile Platform [**Patent Granted**]

## TEACHING EXPERIENCE

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Artificial Intelligence Theory and Practice (CSE327), Lehigh University	
Teaching Assistant with Prof. Jeff Heflin	Spring 2018
Computer Organization and Architecture (CSE202), Lehigh University	
Teaching Assistant with Prof. Jason Loew	Spring 2017

## Reviewers

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- Machine Learning with Applications, Elsevier 2021. [Journal Reviewer]

- Visual Informatics, Elsevier 2021. [Journal Reviewer]
- AAAI Conference on Artificial Intelligence 2021. [Conference Reviewer]
- Knowledge-Based Systems, Elsevier 2021. [Journal Reviewer]
- IEEE Winter Conference on Applications of Computer Vision (WACV) 2021. [Conference Reviewer]
- Knowledge-Based Systems, Elsevier 2020. [Journal Reviewer]
- IEEE Winter Conference on Applications of Computer Vision (WACV) 2020. [Conference Reviewer]
- IEEE Winter Conference on Applications of Computer Vision (WACV) 2019. [Conference Reviewer]
- Efficient Deep Learning for Computer Vision (ECV) on IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2019. [Conference Reviewer]

## **PATENT**

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- Bolan Jiang, **Xin Li**, Shuxue Quan, and Yunke Pan. "Combining Convolution and Deconvolution for Object Detection." U.S. Patent No. 10,628,705. 2020.

## **AWARDS**

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- **Silver Medal** in the Peking University/Baidu - Autonomous Driving competition. 01/2020.
- **Qualstar Award** for the excellent work in driver monitoring system development, Qualcomm. 01/2020.
- **No.1** in the ApolloScape Trajectory Prediction competition. 10/2019.
- **Student Travel Grant** from US National Science Foundation (NSF) to the IEEE INFOCOM 2017. 02/2017.
- **Gotshall Fellowship**, Lehigh University. 09/2015-05/2016.
- **First Prize** in the Shandong (China) Division of the "Challenge Cup" National College Student Curricular Academic Science and Technology Works Competition. 07/2011.
- **Third Prize** in the National Finals (China) of the National Collegiate Programming Contest (C Programming Language Track). 07/2011.
- **First Prize** in the Shandong (China) Division of the National Collegiate Programming Contest (C Programming Language Track). 05/2011.
- **Bronze Medal** in the Shandong (China) Division of the ACM International Collegiate Programming Contest. 05/2011.

## **RESEARCH PUBLICATIONS**

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- **Xin Li**, Dawei Li. "GPFS: A Graph-based Human Pose Forecasting System for Smart Home with Online Learning." ACM Transactions on Sensor Networks (TOSN). 2021.
- Xiaowen Ying, **Xin Li**, Mooi Choo Chuah. "Weakly-supervised Object Representation Learning for Few-shot Semantic Segmentation." IEEE Winter Conference on Applications of Computer Vision (WACV). 2021.
- **Xin Li**, Xiaowen Ying, Mooi Choo Chuah. "GRIP++: Enhanced Graph-based Interaction-aware Trajectory Prediction for Autonomous Driving". arXiv preprint. 2020.
- **Xin Li**, Xiaowen Ying, Mooi Choo Chuah. "GRIP: Graph-based Interaction-aware Trajectory Prediction." IEEE INTELLIGENT TRANSPORTATION SYSTEMS CONFERENCE (ITSC). 2019. [**Oral**]
- **Xin Li**, Shuai Zhang, Bolan Jiang, Yingyong Qi, Mooi Choo Chuah, Ning Bi. "DAC: Data-free Automatic Acceleration of Convolutional Networks." IEEE Winter Conference on Applications of Computer Vision (WACV). 2019. [**Oral + Poster**]
- Xiaowen Ying, **Xin Li**, Mooi Choo Chuah. LiveFace: A Multi-Task CNN for Fast Face-Authentication. 2018 IEEE International Conference on Machine Learning and Applications (ICMLA). 2018. [**Poster**]
- **Xin Li**, Mooi Choo Chuah. "ReHAR: Robust and Efficient Human Activity Recognition." IEEE Winter Conference on Applications of Computer Vision (WACV). 2018. [**Oral + Poster**]
- **Xin Li**, Mooi Choo Chuah. SBGAR: Semantics Based Group Activity Recognition. IEEE International Conference

on Computer Vision (ICCV). 2017. [**Poster**]

- **Xin Li**, Mooi Choo Chuah, Subhrajit Bhattacharya. UAV assisted Smart Parking Solution. IEEE International Conference on Unmanned Aircraft Systems, 2017.
- **Xin Li**, Qinghan Xue, Mooi Choo Chuah. CASHEIRS: Cloud Assisted Scalable Hierarchical Encrypted Image Retrieval System. IEEE International Conference on Computer Communications (IEEE INFOCOM). 2017. [**Oral**]

**Skills:** Proficient in Python, C/C++, C#, Java, SQL, MATLAB; Keras, Tensorflow, Caffe, Pytorch; Android