

## EDUCATION

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- Sep. 2019 – Present     **Ph.D. & Msc** in Software Engineering and Intelligent Systems     UNIVERSITY OF ALBERTA, CANADA  
Dept. of Electrical and Computer Engineering
- Overall GPA: **3.9/4.0**
  - Supervisor: Professor Li Cheng
  - Research Interest: Artificial Intelligence, Computer Vision, Human Motion Modelling
- Sep. 2013 – Jul. 2017     **B.Eng.** in Software Engineering (Pilot Program)     JILIN UNIVERSITY, CHINA  
College of Software
- Overall GPA: **89.57/100**
  - Academic Ranking: **1/30** (in the program)

## EXPERIENCE

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- Sep. 2019 – Present     Vision and Learning Lab, University of Alberta     EDMONTON, CANADA  
**Research Assistant.** Supervisor: Professor Li Cheng
- Mar. 2019 – Aug. 2019     Wangle Hulian Beijing Technology Co.Ltd     BEIJING, CHINA  
**Algorithm Engineer.** Mentor: Haibo Gu
- Sep. 2017 – Mar. 2019     Institute of Computing Technology, Chinese Academy of Sciences     BEIJING, CHINA  
**Research Assistant.** Mentor: Juan Cao

## PROJECTS & PUBLICATIONS

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- Sep. 2019 – Present     **Multi-Modal Human Action and Video Generation**     UNIVERSITY OF ALBERTA
1. The topic is to generate human behaviors conditioned on other modalities (e.g. text, categories).
  2. Synthesized visually pleasing human motions by a novel VAE-based (i.e. Variational AutoEncoder) network with Lie pose representation, and curated own dataset ([Demo Webpage](#)).
  3. Built up a novel pipeline to generate human videos from action type & single image with graphics & machine learning apparatus.
  4. One first-author paper published on ACM MultiMedia 2020<sup>[1]</sup>, and another is submitted to IJCV.
- Sep. 2017 – Mar. 2019     **Fake News Detection on Social Media**     ICT, CHINESE ACADEMY OF SCIENCES
1. Designed, implemented and deployed algorithms for a real-time online fake news detection system<sup>†</sup>.
  2. Exploited the roles of emotion, visual/textual content and propagation for news credibility evaluation.
  3. Developed a distributed crawling system that collected over 10 million posts from Weibo platform.
  4. A pre-print first-author paper “Exploiting Emotions for Fake News Detection on Social Media”<sup>[2]</sup>.
- Apr. 2015 – Apr. 2016     **National Undergraduate Innovative Training Project**     JILIN UNIVERSITY
1. Developed a landscape recommendation system based on image retrieval method.
  2. Adopted *Bag of Features* for image representation and *KD-Tree* for high-dimensional feature retrieval.
  3. Published two papers<sup>[13,4]</sup>, one software copyright<sup>[5]</sup> and was awarded as **Outstanding Project**.

## HONORS & CONTEST

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- Oct. 2016     **Qihoo 360 Scholarship** (top 5 out of 1000)     JILIN UNIVERSITY

<sup>†</sup>The program selected **top 30** students amongst 281 in the 1st school year.

<sup>‡</sup>[newsverify.com](http://newsverify.com)

Nov. 2015	<b>National Scholarship</b> (top 5 out of 281)	MINISTRY OF EDUCATION
Dec. 2015	Excellent Student of Jilin University	JILIN UNIVERSITY
2014, 2015	Second-level Scholarship of Jilin University	JILIN UNIVERSITY
2015, 2016	College Excellent Student	JILIN UNIVERSITY
May 2015	The 1 <sub>st</sub> Prize in <i>Jilin Provincial Mathematical Contest in Modeling</i>	JILIN PROVINCE

## SKILLS

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**Programming Languages:** Python, C, C++, Java, C#, Matlab, R, HTML and Latex.

**Technologies:** PyTorch, Keras, SciPy, NumPy, Pandas, Scikit-learn, Weka, Jieba, UNIX, Git, Unity

**Natural Languages:** English, Chinese (mother language)

## PUBLICATIONS

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1. **Guo, Chuan**, Xinxin Zuo, Sen Wang, Shihao Zou, Qingyao Sun, Annan Deng, Minglun Gong, and Li Cheng. "Action2Motion: Conditioned Generation of 3D Human Motions." In Proceedings of the 28th ACM International Conference on Multimedia, pp. 2021-2029. 2020.
2. **Guo, Chuan**, Juan Cao, Xueyao Zhang, Kai Shu, and Miao Yu. "Exploiting emotions for fake news detection on social media." arXiv preprint arXiv:1903.01728 (2019).
3. Ji, Kaixuan, **Chuan Guo**, Shengfu Zou, Yang Gao, and Hongwei Zhao. "Image Retrieval Algorithm Based on Feature Fusion and Bidirectional Image Matching." In 2015 4th National Conference on Electrical, Electronics and Computer Engineering. Atlantis Press, 2015.
4. Zou, Shengfu, **Chuan Guo**, Kaixuan Ji, Yang Gao, and Hongwei Zhao. "Design and Implementation of Tourist Landmarks Recommending System." In 2016 3rd International Conference on Materials Engineering, Manufacturing Technology and Control. Atlantis Press, 2016.
5. Jilin University. Landscapes Recommendation System V1.0[CP/CD]. Copyright Number: 2015SR259762