Bao Xin Chen

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Citizenship: Canadian

Education

Sep 2012 to Apr 2016 **University of Toronto**
Honours Bachelor of Science with High Distinction, Computer Science Specialist, Focus in Artificial Intelligence
CGPA: 3.84 / 4.0

Sep 2016 to Apr 2018 **York University**
Master of Science, Computer Science, Focus in Robot Vision
CGPA: 3.80 / 4.0

Relevant Courses

Data Analysis and Visualization (A)
Embodied Intelligence (A)
Distributed Computing (A-)
Databases (SQL) (A+)
Computer Networks (A+)
Computer Networking Systems (A+)
Introduction to Robotics (A+)
Machine Learning and Data Mining (A+)
Probabilistic Learning and Reasoning (A+)
Neural Networks & Machine Learning (A+)
Visual Computing (A+)
Image Understanding (A+)

Projects

Machine Learning Facial Expression Prediction on Kaggle Team work, 2 members

- Our result was ranked in **Top 2** on the Kaggle in-class competition
- CNN (Convolutional Neutral Network) was used
- AWS (Amazon Web Service) with GPU was used to train CNN

Robotic Person-Following Robot Team work, 2 members

- Proposed a robust Selected Online Ada-Boosting tracking algorithm for the person-following robot (CRV 2017)
- Proposed a Convolutional Neural Networks tracking algorithm for person-following robot (ICVS 2017)

Publications

Bao Xin Chen, Raghavender Sahdev, and John K. Tsotsos, "Person Following Robot Using Selected Online Ada-Boosting with Stereo Camera," in *Computer and Robot Vision (CRV), 2017 14th Conference on*, IEEE, 2017, pp. 48-55.

- **Received Best Robotics Paper Award**
- **Orally** presented at CRV2017, Edmonton, Canada

Bao Xin Chen, Raghavender Sahdev, and John K. Tsotsos, "Integrating Stereo Vision with a CNN Tracker for a Person-Following Robot," in *International Conference on Computer Vision Systems (ICVS)*, Springer, 2017.

- **Received Best Paper Finalist Award**
- **Orally** presented at ICVS2017, Shenzhen, China

Technical Skills

Programming: Assembly, Java, C(#,++), VB.NET, Shell, Verilog, Scheme, Perl, Groovy, Python
Data Analysis: MATLAB, R
Machine Learning Tools: Pytorch, **Tensorflow**, Cuda
Computer Vision Tools: OpenCV
Robotics: ROS
Operating System: Windows, Ubuntu, AIX

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Work Experience

May 2014 to Aug 2015 (Intern.) **IBM** (Canada) - PureData Operational Analytics Software Developer

- Worked on a PureData Operational Analytics (PDOA) System project with Java and JavaScript in a Linux based system (IBM AIX)
- Fixed defects for PDOA to improve usability
- Completed tasks to help fix-pack releasing
- Improved product globalization to enhances Multilanguage support
- Provided training for new coming team members

Sep 2015 to Apr 2016 **U of T** (Department of Computer Science) Teaching Assistant

- TA for CSC465 Formal Methods in Software Design (Sep 2015 to Dec 2015)
- TA for CSC258 Computer Organization (Verilog) (Jan 2016 to Apr 2016)

Sep 2016 to Now **York University** (Department of EECS) Teaching Assistant

- Lab and office hour TA for C programming language course
- Lab TA for web development and Android App development course
- Project TA for database course
- Marking TA for Java application development and web development course

Jun 2016 to Now **York University** (Professor John K. Tsotsos' Lab) Research Assistant

- Worked on Person-following Robot project
- Published two papers on Person-following Robot (Received two awards)

Awards

2013-2016	Dean's List	University of Toronto, Faculty of Arts & Science
2016	Graduated with High Distinction	University of Toronto, Woodsworth College
2016	Lassonde Graduate Entrance Scholarship (for the first year)	York University, Toronto, Canada
2016	York University Graduate Fellowship (for two years)	York University, Toronto, Canada
2017	Best Robotics Paper	AI-GI-CRV2017, Edmonton, Canada
2017	Best Paper Finalist	ICVS2017, Shenzhen, China

Interests

Robotic, Computer Vision, Computer Hardware, New Technologies, Badminton, etc.