

Bowei Chen

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Personal website: <https://armastuschen.github.io>

EDUCATION

Carnegie Mellon University, Robotics Pittsburgh, USA
Master of Science in Robotics 08/2020-06/2022

Northeastern University (NEU), Software Engineering Shenyang, China
Bachelor of Engineering 09/2016-07/2020

- GPA: 4.2/5.0; Ranking: 1/43

University of Wisconsin-Madison, Computer Science Madison, USA
Visiting Student 01/2019-05/2019

- GPA: 3.75/ 4.0
- Courses: *Intro-Prog Langs&Compilers, Intro-Combinatorics, Programming III, Linear Algebra II*

RESEARCH EXPERIENCE

Université Laval Québec City, Canada
Research Assistant, Supervisor: Jean-François Lalonde 06/2019-09/2019

- Conducted the project *Learning High Dynamic Range from Indoor Panoramas*;
- Conducted a literature review on lighting understanding; proposed a deep learning algorithm to learn High Dynamic Range (HDR) Panorama from Indoor Low Dynamic Range (LDR) video;
- Implemented the algorithm in Pytorch and conducted experiments;

Northeastern University Shenyang, China
Research Assistant, Supervisor: Guibing Guo 10/2017-01/2020

- Developed recommendation algorithms based on deep learning;
- Built several deep learning recommendation models, including hierarchical attentive sequential networks and models based on GAN; implemented these algorithms in Tensorflow and Theano, which performed well on many real-world datasets in terms of ranking accuracy;
- Managed three undergraduate research assistants; assisted in several graduate projects;
- Co-authored five papers (three were published and two are under review); the algorithms were applied to some high-tech companies and received high praise.

WORKING EXPERIENCE

Tencent Shenzhen, China
Research Assistant Intern, Supervisor: Fajie Yuan 10/2019-01/2020

- Launched the project *Non-autoregressive Sequence Generation Method Based on Bi-directional Dilated Convolutional Neural Network*.
- Proposed a non-autoregressive generative method based on bi-directional dilated convolutional neural network to generate sequences of items (words). A mask iteration algorithm is introduced to refine the generated sequences.
- Implemented the algorithms in Tensorflow and conducted experiments.

PUBLICATION

G. Guo, **B. Chen (Only Student Researcher)**, X. Zhang, Z. Liu, Z. Dong, X. He. Leveraging Title-Abstract Attentive Semantics for Paper Recommendation. The Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI 2020).

R. Ding, G. Guo, X. Yang, **B. Chen**, Z. Liu, X. He. BiGAN: Collaborative Filtering with Bidirectional Generative Adversarial Networks. The SIAM International Conference on Data Mining (SDM 2020).

H. Luo, X. Zhang, **B. Chen**, G. Guo. Multi-view Visual Bayesian Personalized Ranking from Implicit Feedback. Proceedings of the ACM Conference on User Modeling, Adaptation, and Personalization (UMAP 2018).

R. Ding, **B. Chen**, G. Guo, X. Yang. path2vec: Adversarial Path Sampling for Recommender Systems. (Under Review) IEEE Intelligent Systems.

G. Guo, H. Zhou, **B. Chen (Corresponding Author)**, Z. Liu, X. Xu, X. Chen, Z. Dong. IPGAN: Generating Informative Item Pairs by Adversarial Sampling. (Under Review) IEEE Transactions on Neural Networks and Learning Systems (TNNLS).

EXTRACURRICULAR ACTIVITY

Shenyang Licheng Community	Shenyang, China
<i>Volunteer</i>	2017/9-2018/1

- Taught middle school students computer courses.

Social Practice to Explore the Culture of Internet Companies	Shenzhen, China
<i>Team leader</i>	2018/7

- Led a 7-person team to visit Tencent and discussed the prospect of AI and deep learning with senior scientists.

HONORS & AWARDS

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| • The Second Prize in China Undergraduate Mathematical Contest in Modeling | 2018 |
| • Excellent Student of Northeastern University | 2017, 2019 |
| • Excellent Individuals of Social Practice Activities of Northeastern University | 2018 |
| • Outstanding Volunteer in Licheng Community | 2018 |
| • National Scholarship | 2017 |
| • Outstanding Graduates of Northeastern University | 2019 |

SKILLS & INTERESTS

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- Language Skills: Chinese (Native), English (Fluent), Cantonese (Conversational)
 - Computer Skills: Java, Python, C++, C, Pytorch, Tensorflow, JavaScript
 - Interest: Basketball, Singing, Popular Music