

JUNCHI BIN

1325 Aldon Road, Kelowna, BC, Canada, V1X 5A1
+1 778-215-0328 ◊ junchibin@outlook.com

EDUCATION

University of British Columbia , Kelowna, Canada M.A.Sc in Electrical Engineering (Thesis-Based Program) Supervisors: Dr. Zheng Liu and Dr. Eric Li	Sept. 2016 - Expected Sept. 2018
Northern Arizona University , Flagstaff, United States B.S. in Electrical Engineering Dual-degree with Chang'an University	Aug. 2013 - May 2016
Chang'an University , Xi'An, China B.Eng. in Automation	Aug. 2012 - Jun. 2013

TECHNICAL EXPERIENCE

Data Nerds, Canada , Data Scientist	Dec. 2016 - Jul. 2018
<ul style="list-style-type: none">· Data Nerds is the real-estate-oriented data company, which is one of the members of Forbes Real Estate Council. Currently, the company has accomplished series-A financing.· The first period (Dec. 2016 - Jan. 2018) is an industrially defined research project funded by Mitacs Accelerate. After expiration of funding, I am working as contracted data scientist for Data Nerds (Mar. 2018 - Jul. 2018).· Investigated machine learning algorithms for real estate appraisal.· Developed algorithms of data fusion for improved appraisal performance based on multi-source data (geography, images and social information)· Conducted research on tensor decomposition for sparse spatial-temporal data.	
University of British Columbia, Canada , Graduate Research Assistant	Sept. 2016 - Present
<ul style="list-style-type: none">· Conducted research on data analysis, machine learning.· Identified and characterized different sources of urban data including satellite images, street view images, crimes, and so on.· Supervised colleagues' projects such as anomaly detection for wind turbine, ocean transportation analysis and non-destructive testing.	

TEACHING EXPERIENCE

University of British Columbia , Teaching Assistant	Sept. 2017 - Dec. 2017
<ul style="list-style-type: none">· Course: APSC254 - Instrumentation and Data Analysis.· Hosted tutorial session to help students with their homeworks, experiments and examination.	
Northern Arizona University , Teaching Assistant	Sept. 2015 - May 2016
<ul style="list-style-type: none">· Courses: EE348 - Signal Processing and EE188 - Introduction to Electrical Engineering.· Helped professor grade assignment, lab reports, and exams. Moreover, make answers for each assignment and exams.	

PRESENTATION

The IEEE 2018 International Instrumentation and Measurement Technology Conference	May 2018
The 2nd IEEE International Conference on Computational Intelligence and Applications	Sept. 2017
The 45th Annual Meeting of the Statistical Society of Canada, Poster	Jun. 2017
Child Protection Hackathon 2017, Hosted by Two Hat Security and Microsoft Vancouver	Jul. 2017

AWARDS & AFFILIATIONS

Student Travel Award from Statistical Society of Canada	Mar. 2017
Research Assistantship	Sept. 2016
Member in IEEE student chapter in Northern Arizona University	Aug. 2013 - May 2014
Member in Institute Science & Technology Association in Chang'an University	Aug. 2012 - Jun. 2013

SKILLS

Research Interest	Urban Computing, Data Fusion and Machine Learning
Programming Skills	R, C#, Python, SQL, Matlab, VHDL
ML Skills	Regression Modeling, CNN, RNN, Tensor Decomposition
Engineering Skills	FPGA, Signal System, Automation System
Design Software	Rstudio, Matlab, Visual Studio, MS Azure, Pycharm, Modelsim, Quartus
Language	Fluent in English, Mandarin

PUBLICATIONS

Junchi Bin et al. Regression Model for Appraisal of Real Estate using Recurrent Neural Network and Boosting Tree. *IEEE 2017 International Conference on Computational Intelligence and Applications (ICCI)*.

Chengkai Zhang, **Junchi Bin** and Zheng Liu. Wind Turbine Assessment through Inductive Transfer Learning. *IEEE 2018 International Instrumentation and Measurement Technology Conference (I2MTC)*. **Accepted**.

Qiwen Jin, **Junchi Bin**, Weixin Ren and Zheng Liu. Structural Performance Analysis and Prediction for In-service Bridge with SHM Data Mining. *CSCE 2018 Annual Conference*. **Accepted**.

WORK IN PROGRESS

Junchi Bin, Bryan Gardiner, Eric Li and Zheng Liu. Peer-dependence Valuation Model for Real Estate Appraisal. *Neural Processing Letters*. **Under Review**.

Junchi Bin, Bryan Gardiner, Eric Li and Zheng Liu. Simple Attention-based Multi-modal Fusion for Real Estate Appraisal. *Pattern Recognition Letters*. **Under Review**

Junchi Bin, Bryan Gardiner, Eric Li and Zheng Liu. Deep Fusion-based Real Estate Appraisal. *Information Fusion*. **Submitted**

Huan Liu et al. A Nonlinear Regression Application Via Machine Learning Techniques for Geomagnetic Data Reconstruction Processing. *IEEE Transactions on Geoscience and Remote Sensing*. **Under Review, One of the authors**.