NAN WU

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RESEARCH INTERESTS

Machine learning, deep learning, especially their application in healthcare and medical imaging.

EDUCATION

New York University, Center for Data Science
Ph.D. student, supervised by Krzysztof J. Geras and Kyunghyun Cho, *September 2018 - Present*
M.S. in Data Science *September 2016 - May 2018*

University of Science and Technology of China, Special Class of Gifted Young
B.S. in Statistics and B.A. in Business Administration *September 2012 - June 2016*

RESEARCH EXPERIENCE

CILVR Lab, New York University.
Research Intern *September 2017 - August 2018*

· Supervisors: Kyunghyun Cho and Krzysztof J. Geras.

Key Laboratory of Brain Function and Disease , Chinese Academy of Sciences.
Undergraduate Research Intern *November 2014 - July 2016*

· Supervisor: Xiaochu Zhang.

· Junjie Bu, Ru Ma, Nan Wu (co-first author), Xiaochu Zhang. (2015). Smoking cue-reactivity cortical connectivity reflected in EEG network in smokers. Invited for oral presentation in The 18th National Academic Congress of Psychology, Tianjin, China.

· Xiaochu Zhang, Junjie Bu, Nan Wu. BrainART. Copyright of Computer Software (ID: 2016SR202558).

Shanghai Institute of Biological Sciences, Chinese Academy of Sciences.
Summer Research Intern, *June 2013 - July 2013*

· Supervisor: Yi-Feng Zhang.

INTERNSHIPS

AIG, Science.
Computer Vision and NLP Research Assistant *May 2017 - December 2017*

· Developed networks for car damage detection, especially for generating saliency map. Built connection between real image and 3D projection with generative models.

· Compared performances of various embedding models for insurance data and explored the transition of word space under a growing context space.

Bayesquare Foundation Inc.
Machine Learning Research Intern *November 2016 - May 2017*

· Researched machine learning and deep learning methods for finance and econometrics.

Haloband LLC.
Growth hacker (Marketing Researcher) Intern *March 2016 - May 2016*

· Built user profiles for advertising strategies and website designing.

PUBLICATIONS

Globally-Aware Multiple Instance Classifier for Breast Cancer Screening.
Y. Shen, ***N. Wu****, J. Phang, J. Park,, S. Kim, L. Moy, K. Cho, K. J. Geras.* arXiv preprint 2019.
Improving localization-based approaches for breast cancer screening exam classification.
T. Fvry, J. Phang, ***N. Wu****, S. Kim, L. Moy, K. Cho, K. J. Geras.* MIDL 2019 Conference Abstract.
Screening Mammogram Classification with Prior Exams.
J. Park, J. Phang, Y. Shen, ***N. Wu****, S. Kim, L. Moy, K. Cho, K. J Geras.* MIDL 2019 Conference Abstract.
Deep Neural Networks Improve Radiologists' Performance in Breast Cancer Screening.
N. Wu*, J. Phang, J. Park, Y. Shen, Z. Huang, M. Zorin, S. Jastrzebski, T. Fvry, J. Katsnelson, E. Kim, S. Wolfson, U. Parikh, S. Gaddam, L. Young Lin, K. Ho, J. D. Weinstein, B. Reig, Y. Gao, H. Toth, K. Pysarenko, A. Lewin, J. Lee, K. Airola, E. Mema, S. Chung, E. Hwang, N. Samreen, S Kim, L. Heacock, L. Moy, K. Cho, K. J. Geras.* arXiv preprint 2019.
Breast Density Classification with Deep Convolutional Neural Networks.
N. Wu*, K. J. Geras, Y. Shen, J. Su, S. Kim, E. Kim, S. Wolfson, L. Moy, K. Cho. ICASSP 2018.*
High-Resolution Breast Cancer Screening with Multi-View Deep Convolutional Neural Networks.
K. J. Geras, S. Wolfson, Y. Shen, ***N. Wu****, S. Kim, E. Kim, L. Heacock, U Parikh, L. Moy, K. Cho. arXiv preprint 2018.*

AWARDS

Best Paper Award, AI for Social Good workshop, ICML 2019.	*June 2019*
Travel Funding, AI for Social Good workshop, ICML 2019.	*June 2019*
Outstanding Student Scholarship, Top 10% in USTC.	*November 2015*
Full Graduate Scholarship, NYU.	*2018 - Present*
Outstanding Student Scholarship, Top 10% in USTC.	*November 2015*
Alumni Outstanding Student Scholarship, 6 out of 1027 in School of Gifted Young, USTC.	*June 2015*
Outstanding Student Scholarship, Top 10% in USTC.	*November 2013*
Outstanding Freshman Scholarship, Top 5% in USTC.	*September 2012*
National Olympiad in Informatics, Hebei Province, Silver Medal.	*2010 and 2011*
National Olympiad in Biology, Hebei Province, Silver Medal	*2011*
National Olympiad in Physics, Hebei Province, Bronze Medal	*2011*

TEACHING EXPERIENCE

Data Management and Analysis, Computer Science Department at NYU.	*Fall 2018*
Theory of Probability, NYU Courant Institute.	*Spring 2018*
Machine Learning and Computational Statistics, NYU Center for Data Science.	*Spring 2018*
Decision Analytics for Sports, NYU Stern.	*Fall 2017*
Data Driven Decision Making, NYU Stern.	*Spring 2016*

ACTIVITIES

2018 MIT-Mount Sinai NYC Grand Hack. *November 2018*
Mentor in Rehabilitation & Human Performance Track.
Challenge Cup, National College Student Business Plan Competition. *December 2015*
Team Member & Keynote Speaker, honored with Gold Medal.
China Youth Innovation and Entrepreneurship Venture Competition. *November 2015*
Team Member & Keynote Speaker.
Women soccer team of School for Gifted Young, USTC. *2012 - 2016*
Member & Captain at 2015.
APRU-University of Malaya Summer Program: Developing Future Global Leaders of the Pacific Rim.
Student Ambassador of USTC. *August 2015*
Student Union of School for Gifted Young, USTC. *2012 - 2014*
Member & President at 2014.

TECHNICAL SKILLS

Programming Languages	Python, C, Java, MATLAB, R, SQL, SAS, Latex
Framework	PyTorch, Tensorflow, Keras, Hadoop, Spark, PySpark