# JUNWEI DENG

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#### **EDUCATION**

#### University of Michigan - Ann Arbor

Expected on Apr. 2021

Master of Science in Information (Data Science Track)

GPA: 3.8

• Coursework: Information Visualization, Data Manipulation, Machine Learning, Programming

Shanghai Jiao Tong University (UM-SJTU Joint Institute)

Expected on Aug. 2020

Bachelor of Science in Electrical and Computer Engineering

GPA: 3.82 Rank: 1/162

• Coursework: Data Structure, Algorithm, OS, Computer Organization, Computer Network, Hadoop

#### RESEARCH & PROJECTS

#### Graph Neural Network Coldstart Model Develop

Sept. 2019 - now

University of Michigan - The Foreseer Research Group, Ann Arbor, U.S.

• Cleaned and constructed the dblp data-set on GreatLake, and implement base line models.

Cell Classification, Detection and Segmentation of Cytology Image Mar. - Sept. 201 Shanghai Jiao Tong University - Advanced Computer Architecture Laboratory, Shanghai, China

- Design, implement and tuning a hybrid network based on ResNet and U-Net.
- Implement the PatchMatch method and improve it to adapt the task to removel unwanted cells.
- Complete the papers and posters concerned about the research area with my tutor(Jing Ke).

Platform for Automatically Downloading & Processing Tsunami Data Feb. - Sept. 2018 Shanghai Jiao Tong University, Naval Architecture, Ocean & Civil Engineering, Shanghai, China

- Designed and implemented the platform by Python to save tsunami researchers' time
- Visualized the tsunami data as HTML map to produce a quicker retrieval for tsunami researchers
- Maintain the platform on Github to ensure its long-term availability

## WORK EXPERIENCE

## Teaching Assistant(VG100[=Engineering 100 @Umich])

May. - Aug. 2018

Shanghai Jiao Tong University (UM-SJTU Joint Institute), Shanghai, China

- Guided six course projects' design, procurement, implementation and presentation and one of them was awarded "Best Innovation Award" in design EXPO
- Graded 200+ assignments to ensure their ability to express their technical thinking.

## Software Engineering Intern

Feb. - May. 2019

Maver Medical, Shanghai, China

- Designed a light-weight neural network to solve a resistance network back-stepping problem.
- Code over 20 signal filter by C++ and the code is used in developing medical instrument.

## **PUBLICATION**

- [Full Paper] J. Ke, **J. Deng**, Y. Lu, D. Wang, Y. Song and H. Zhang. Assessment and Elimination of Inflammatory Cell: A Machine Learning Approach in Digital Cytology. DICTA 2019(Oral) [to appear].
- [Full Paper] J. Deng, Y. Lu, and J. Ke. 2020. An Accurate Neural Network for Cytologic Whole-Slide Image Analysis. In Proceedings of the Australasian Computer Science Week Multiconference.
- [Poster] J. Ke, **J. Deng**, and Y. Lu. Noise Reduction with Image Inpainting: An Application in Clinical Data Diagnosis. In Proceedings of SIGGRAPH 19 Posters.

# SKILLS & AWARDS

Languages & Applications: Python, C/C++, Latex, Matlab, JAVA, R, Tableau, SQL, Shell, Latex National Scholarship, Ministry of Education of the People's Republic of China, 2018