

Jiayu (Gary) Wang

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Education

M.S. Biostatistics, Washington University in St. Louis (*GPA: 3.93/4*) 2015.6-2016.12
B.S. Computer Science, Shanghai Jiao Tong University, China 2011.9-2015.6
(*Thesis: Research review on multilinear maps over the integers*)
B.S. Biology, Shanghai Jiao Tong University, China 2011.9-2015.6
(*Thesis: The application of data-mining in diagnosis of Breast Cancer*)

Technical Skills

Programming: Python, Perl, C, C++, Java
Web & Database: HTML5, CSS, Javascript, SQL
Mathematical tools: Matlab, R, SAS, SAS Macro, Mplus, Mathematica, SPSS
Machine Learning: Weka, Spotfire, randomForest, NumPy, scikit-learn

Experience

Research Assistant, WashU, Prof Igor's lab 2015.9-2016.12

1. Built a kNN based model in Matlab to predict the activities of the emergency room with limited features, our prediction achieved an accuracy of 70% over the test data (200,000 records).
2. Improved the FNMF algorithm by using parallel processing, and discovered 7 sub-groups of depression from the genotypic and phenotypic data of patients, everything coded in perl and R.
3. Programmed the post-processing part of our machine learning software PGMRA in Perl on sever.
4. Used SAS to run and plot GLMM model in a psychiatry study on the effect of age and sex.
5. Currently working on the real-time data flow of 24 ICU units in the biggest hospital in St. Louis. We are going to build a real-time prediction system with json.

Statistician, WashU, Prof Wong's lab 2016.6-2016.9

Used SAS to run a Multi-Level Mixed model to test the reliability of EMA data and the relationship between mood changes and cognitive control level on aged people. Found that EMA data are highly concordant with the traditional data and have a greater power to detect the differences between groups. Also detected a significantly bigger fluctuation of negative mood in people who have lower cognitive control.

Intern, Professor Xianting Ding's Lab 2014.9-2015.5

Developed a SVM model and a neuron-network model in C++ to predict the survivability of breast cancer patients and tried to foresee the outcome of treatments. The dataset has 1,290,000 records. The final model has 80% accuracy in test data.

Intern, Roche Pharmaceutical Corporation, Shanghai, China 2014.9-2015.4

Coordinated the collection of employees' training data to facilitate future improvement. In the 2015 annual meeting and projects exhibition, coordinated over 4000 employees' logistic in Shanghai.

Intern, Ogilvy & Mather Advertising Corporation, Shanghai, China 2014.7-2014.9

Managed the financial flow of 2 customers: Huggies and Ferrero; I proposed the advertising activities during festivals and collected information about competitors' advertisements.

Campus Involvement

Chair of Organization Department in WUCSSA 2015.10-2016.12

WUCSSA is the Chinese Students and Scholars Association in Washington University. The organization's objective is to present Chinese culture to the entire campus and help new students to fit in. I was responsible for organizing culture events and helping new students settled in the school community.

Awards and Certification

School annual scholarship (2013 & 2014)

SAS Certified Base Programmer

Publication

Ada H.Z., Igor Z., **Jiayu W.**, Robert C., Andrey P. Anokhin (Under review). The Development of Temperament and Character during Adolescence: Gender Differences in Two Phases of Change. *Development and Psychopathology*

Links

linkedIn: <https://www.linkedin.com/in/jiayu-wang-904907107>

github: <https://github.com/garyblocks/>

website: <http://garyblocks.com/>