# ANHUA LIN

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#### **EDUCATION**

• Ph.D. in Operations Research

The Johns Hopkins University, 2003

• M.S. in Computer Science

The Johns Hopkins University, 2002

• B.S. in Applied Mathematics

University of Science and Technology of China, 1997

#### EXPERIENCE

#### Data Scientist

Laureate Education Inc.

September 2015 – present

- Built machine learning models to predict various probabilities such as lead conversion and student attrition etc.
- Built time series models to predict student enrollment count
- Conducted data analysis to analyze the effectiveness of business strategies
- Applied propensity score matching for analyzing observational data
- Cleaned raw data and produced analysis reports

# Senior Operations Research Analyst

Laureate Education Inc.

June 2011 – September 2015

- Designed and implemented optimization solutions such as mixed-integer programming and heuristic models to increase the efficiency of various business functions, for example, scheduling models for course section assignment and agent travel plan
- Analyzed large phone call records to find patterns

## Assistant Professor (04–09) and Associate Professor (09–11) of Mathematical Sciences

Middle Tennessee State University

August 2004 – May 2011

- Conducted research in applied mathematics
- Taught undergraduate and graduate mathematics classes

## Visiting Assistant Professor of Mathematics

Embry Riddle Aeronautical University August 2003 – May 2004

• Taught undergraduate mathematics classes

### COURSES IN STATISTICS

- Mathematical Statistics
- Linear Models
- Nonparametric Statistics
- Probability Theory

- Stochastic Processes
- Neural Networks

#### **SKILLS**

- Proficient in SAS, R, Python, Excel VBA and SQL
- Good understanding and hands-on experience of machine learning and data analysis techniques

### SELECTED PUBLICATION

- Stable roommates matchings, mirror posets, median graphs, and the local/global median phenomenon in stable matchings, SIAM Journal on Discrete Mathematics, 25, No. 1, 72-94, 2011 (with Christine Cheng)
- Potential impacts of plug-in hybrid electric vehicles on locational marginal prices, Naval Research Logistics, vol. 57(8), 686-700, 2010 (with Lizhi Wang and Yihsu Chen)
- On a special class of regularized central paths for semidefinite programs, Mathematical Programming, Series A, 122, No.1, 65-85, 2010
- A note of the connection between the primal-dual and the  $A^*$  algorithm, International Journal of Operations Research and Information Systems, 1, No.1, 73-85, 2010 (with Xugang Ye and Shih-ping Han)
- A high-order path-following method for projection onto the primal-dual solution set of linear programs, Optimization, 58, No. 8, 947-964, 2009
- On the minimal energy of unicyclic Hückel molecular graphs possessing Kekule structures, Discrete Applied Mathematics, 157, 913-919, 2009 (with Yinmei Cao, Rong Luo and Xiaoya Zha)
- A sharp lower bound of the Randic index of cacti with r pendents, Discrete Applied Mathematics, 156, No. 10, 1725-1735, 2008 (with Rong Luo and Xiaoya Zha)
- A high-order path-following method for locating the least-2-norm solution of monotone LCPs, SIAM Journal on Optimization, 18, No. 4, 1414-1435, 2007
- A class of methods for projection on the intersection of several ellipsoids, SIAM Journal on Optimization, 15, No. 1, 129-138, 2004 (with Shih-ping Han)
- On the distance between two ellipsoids, SIAM Journal on Optimization, 13, No.1, 298-308, 2002, (with Shih-ping Han)