# YI-EN TSAI

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## OBJECTIVE

To obtain a position in a challenging and rewarding technical environment that will allow me to enhance and develop my skills in data collection and analysis.

## EDUCATION

### National Chiao Tung University                                          Hsinchu, Taiwan

*Master of Science in Mathematical Modeling and Scientific Computing*          February 2016

- **Master Thesis:** "Stochastic Newton Method for Large Scale Nonlinear Support Vector Machine " .
- **Relevant Coursework:** Data Mining, Machine Learning (self-study), Optimization, Algorithms, Scientific Computing.

### National Taiwan Normal University                                          Taipei, Taiwan

*Bachelors of Science in Mathematics, Minor in Physics and Mathematics Education*          July 2013

- **Academics: 4.0/ 4.0 GPA**, Academic Excellence Award (7 semesters) , Academia Sinica Hung-Ching Chou Scholarship Recipient.
- **Relevant Coursework:** Numerical Analysis, Linear Programming, Optimization, Multivariate Analysis.

## EXPERIENCE & LEADERSHIP

### National Taiwan University of Science and Technology                                          Taipei, Taiwan
### (Laboratory of Data Science and Machine Intelligence)

*Research Assistant*                                          September 2013 – January 2016

- Conducted research on stochastic optimization and support vector machines for large-scale learning problem.
- Proposed new algorithmic framework and programmed in MATLAB.
- Will submit research paper to conference on machine learning with advisor.

### Physic Club                                          Taipei, Taiwan

*Leader*                                          May 2011 – September 2011

- Led a team of 5 students to attend 2011 Taiwan College-Student Physicists' Tournament hold by Department of Physics in National Taiwan Normal University.
- Collaborated with teammates to do research on the scientific problems proposed by the tournament and design, conduct several experiments to find the solution.
- Summarized results and submitted presentation in English to other teams in the tournament.

## SKILLS:

### Computer skills:

- Working knowledge of mathematical programs, graphing and data analysis using MATLAB.
- Working knowledge of document preparation using LATEX and MS Office.
- Understanding knowledge of statistical analysis and data analysis such as R and C++.
- Basic knowledge of data analysis such as Python and SQL.

**Language:** Fluent in Mandarin, limited working proficiency in English.