

# Chia-Hui (Anita) Shen

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Master of Science in Statistics at University of California Davis. Seeking **full-time data analytics related position**. Experienced in **genetic datasets, business strategies, social science research** and other forms of data analysis with over 5 years of experience in R programming and familiarity with Python and Unix.

## EDUCATION

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<b>M.S. Statistics</b>	University of California, Davis	GPA3.71/4.0	12/2017
<b>Exchange Student</b>	Engineering Science, Osaka University (OU), Japan	GPA3.60/4.0	09/2015 - 08/2016
<b>B.B.A. Statistics</b>	National Cheng Kung University (NCKU), Taiwan	GPA3.75/4.0	06/2016
<b>B.S. Mathematics</b>	National Cheng Kung University (NCKU), Taiwan	GPA3.50/4.0	06/2016

## WORK EXPERIENCE

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<b>Bioinformatics Intern</b> , Genomic Health, Redwood City, CA	06/2017-09/2017
<ul style="list-style-type: none"><li>• Designed panel for tumor burden tracking by exploring different gene regions, cost functions and patients</li><li>• Developed optimization of algorithms to track tumor burden mutation with up to 90% patient coverage in less than 50,000 base pair panel size</li><li>• Improved cost efficiency by more than 50% for the optimization of algorithms in UNIX</li></ul>	
<b>Surveying Specialist</b> , Survey and Statistics Research Center, NCKU	09/2012 - 06/2014
<ul style="list-style-type: none"><li>• Assisted investigations with pool surveys by collaborating and consulting with industries</li></ul>	

## RESEARCH EXPERIENCE

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<b>Spam Email Detection</b> , Department of Statistics, UC Davis	04/2017 - 06/2017
<ul style="list-style-type: none"><li>• Filtered important information by collecting and cleaning over 100k text emails</li><li>• Applied Natural Language Processing, including tf-idf and Latent Semantic Analysis on feature engineering</li><li>• Compared and applied 6 machine learning methods including logistic regression, kNN, and others on classifications, improving accuracy to 97%</li></ul>	
<b>Housing Decision Making Criteria in California</b> , Department of Statistics, UC Davis	09/2016 - 12/2016
<ul style="list-style-type: none"><li>• Applied the Zillow housing dataset on making comparisons for every county in California</li><li>• Predicted risk and values to decide affordable housing prices and regions for customers</li><li>• Designed a front-end webpage to visualize the Zillow housing dataset and statistical results</li></ul>	
<b>Causal Inference in Boston Housing Data</b> , SHIMODAIRA Laboratory, OU, Japan	09/2015 - 08/2016
<ul style="list-style-type: none"><li>• Simulated the estimation of correlation for the causal effect in grouped variables</li><li>• Predicted strengths of relations between features by devising housing strategies for clients</li></ul>	
<b>Quality of Genetic Sequencer-MiSeq</b> , Department of Statistics, NCKU, Taiwan	09/2014 - 02/2015
<ul style="list-style-type: none"><li>• Pre-processed data of 100,000 genetic images to obtain matrix dataset and to visualize genetic images</li><li>• Predicted underlying factors by using multivariate analysis in improving the quality of sequencers</li></ul>	

## SKILL

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- Experienced data analysis by using R for over 5 years
- Programming Languages: Python, SAS (Based Programmer 9.0), MATLAB
- Tools: SQL, Unix, Linux, Git, GGplot, Plotly, HTML, Excel, Word, PowerPoint

## LEADERSHIP

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- Director of General Affairs**, Student Association of the Department of Statistics, NCKU
  - Reported and managed the yearly financials and reduced at least 10% of expenses
- Leader of Communication Sections**, Night of Stat, Student Campaign, NCKU
  - Improved profitability by collaborating with other departments in designing marketing strategies