

Alex Shum

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EDUCATION	Iowa State University , Ames, Iowa M.S., Statistics, August 2012 - August 2015. University of Hawaii , Honolulu, Hawaii Undergraduate/Graduate coursework in Mathematics, January 2010 - May 2012 University of Puget Sound , Tacoma, Washington B.A., Economics, August 2004 - May 2008	
PROFESSIONAL AND ACADEMIC EXPERIENCE	Kingland Systems , Ames, Iowa <u>Research Assistant/Statistician</u> January 2015 to August 2015 <ul style="list-style-type: none">• Predict defect rates using generalized linear models and machine learning methods.• Explained statistical concepts to non-technical audience.• Data preprocessing, cleaning and visualization on software engineering data. Schneider Electric SE , Cedar Rapids, Iowa <u>Data Science Intern</u> May 2014 to August 2014 and May 2015 to August 2015 <ul style="list-style-type: none">• Created an R package to interface with internal API server.• Built data visualization front end using Shiny and Dygraphs for time series data.• Authored an online course for statistics in R, Markdown, Jekyll and Shiny.• Visualized internal company datasets using R, ggplot2, ggvis.• Statistical analysis on engineering experiments. Iowa State University , Ames, Iowa <u>Teaching Assistant</u> August 2012 to December 2014 <ul style="list-style-type: none">• TA for Business Statistics, Probability for Computer Science, Statistical Methods.• Primary instructor for Introduction to Statistics; responsible for exams and lectures. University of Hawaii , Honolulu, Hawaii <u>Graduate Research Assistant and Tutor/Grader</u> January 2010 to May 2012 <ul style="list-style-type: none">• Constructed game theoretic models of coalition formation and equilibrium concepts.• Mathematical modeling using Mathematica.• Tutored students in calculus, linear algebra and differential equations. Hawaii National Bank , Honolulu, Hawaii <u>Credit Analyst</u> December 2008 to January 2010 <ul style="list-style-type: none">• Analyzed profit and loss statements and cash flow.• Authored reports about financial status of small businesses.	
SKILLS	Computer Programming and Numerical Computing (Github: http://github.com/ALshum): <ul style="list-style-type: none">• R, Java, C, Matlab, SQL, R Shiny. Desktop Editing, Productivity Software, Other: <ul style="list-style-type: none">• \LaTeX, knitr, markdown, rmarkdown• Microsoft Windows, Apple OS X and Ubuntu Graduate Coursework: Theory of Probability and Statistics, Statistical Methods, Introduction to R Programming, Statistical Computing, Data Mining and Exploratory Data Analysis, Experimental Design, Machine Learning, Pattern Recognition, Algorithms, Data Structures, Artificial Intelligence Awards: 2014 UseR! Data visualization contest winning team. 2015 Prudsys International Data Mining Cup 2nd/3rd place (out of 188 teams).	