

## Alex Shum

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CONTACT INFORMATION	Department of Statistics Iowa State University 2219 Snedecor Hall Ames, Iowa 50011-1210 USA	Google Voice:253-234-5681 E-mail: ashum@iastate.edu E-mail(alt): alex@alshum.com WWW: <a href="http://www.alshum.com">http://www.alshum.com</a>
EDUCATION	<b>Iowa State University</b> , Ames, Iowa M.S., Statistics, August 2012 - August 2015. <b>University of Hawaii</b> , Honolulu, Hawaii Undergraduate/Graduate coursework in Mathematics, January 2010 - May 2012 <b>University of Puget Sound</b> , Tacoma, Washington B.A., Economics, August 2004 - May 2008	
PROFESSIONAL AND ACADEMIC EXPERIENCE	<b>Kingland Systems</b> , Ames, Iowa <u>Research Assistant/Intern Statistician</u> <b>January 2015 to present</b> <ul style="list-style-type: none"><li>• Predict defect rates using generalized linear models and machine learning methods.</li><li>• Explained statistical concepts to non-technical audience.</li><li>• Data preprocessing, cleaning and visualization on software engineering data.</li></ul> <b>Schneider Electric SE</b> , Cedar Rapids, Iowa <u>Data Science Intern</u> <b>May 2014 to August 2014 and May 2015 to August 2015</b> <ul style="list-style-type: none"><li>• Created an R package to interface with internal API server.</li><li>• Built data visualization front end using Shiny and Dygraphs for time series data.</li><li>• Authored an online course for statistics in R, Markdown, Jekyll and Shiny.</li><li>• Visualized internal company datasets using R, ggplot2, ggvis.</li><li>• Statistical analysis on engineering experiments.</li></ul> <b>Iowa State University</b> , Ames, Iowa <u>Teaching Assistant</u> <b>August 2012 to December 2014</b> <ul style="list-style-type: none"><li>• TA for Business Statistics, Probability for Computer Science, Statistical Methods.</li><li>• Primary instructor for Introduction to Statistics; responsible for exams and lectures.</li></ul> <b>University of Hawaii</b> , Honolulu, Hawaii <u>Graduate Research Assistant and Tutor/Grader</u> <b>January 2010 to May 2012</b> <ul style="list-style-type: none"><li>• Constructed game theoretic models of coalition formation and equilibrium concepts.</li><li>• Mathematical modeling using Mathematica.</li><li>• Tutored students in calculus, linear algebra and differential equations.</li></ul> <b>Hawaii National Bank</b> , Honolulu, Hawaii <u>Credit Analyst</u> <b>December 2008 to January 2010</b> <ul style="list-style-type: none"><li>• Analyzed profit and loss statements and cash flow.</li><li>• Authored reports about financial status of small businesses.</li></ul>	
SKILLS	Computer Programming and Numerical Computing (Github: <a href="http://github.com/ALshum">http://github.com/ALshum</a> ): <ul style="list-style-type: none"><li>• R, Java, C, Matlab, SQL, R Shiny.</li></ul> Desktop Editing, Productivity Software, Other: <ul style="list-style-type: none"><li>• <math>\text{\LaTeX}</math>, knitr, markdown, rmarkdown</li><li>• Microsoft Windows, Apple OS X and Ubuntu</li></ul> 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).	