

# ALISON KINGMAN

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45 Poncetta Dr. ◇ Daly City, CA 94015

## EDUCATION

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**Harvey Mudd College, Claremont, CA**  
B.S., Mathematics  
GPA: 3.3, Deans List Spring 2013 - Spring 2016

September 2012 - May 2016

## COURSE WORK

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Algorithms, Computational Statistics, Graph Theory, Operations Research  
Data Structures and Program Development, Advanced Linear Algebra

## SKILLS

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<b>Proficient</b>	Python, Java, R, $\text{\LaTeX}$
<b>Familiar</b>	C++, AngularJs, Django, SQL, JavaScript, HTML, Mathematica, MATLAB

## WORK EXPERIENCE

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<b>Technology Intern</b> <i>TD Securities, New York, NY</i>	June 2015 - August 2015
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- Stored frequently updated trade data in a Cassandra database and analyzed data volumes.
- Created a RESTful web service to retrieve trade data.
- Developed an application using AngularJS to allow a user to view the data as a trade diagnostic tool.

<b>Mathematics Researcher</b> <i>UCLA, Los Angeles, CA</i>	June 2014 - August 2014
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- Tested existing compressed sensing algorithms on different types of signal models.
- Developed theory on the behavior of existing compressed sensing algorithms.
- Designed practical algorithms that could recover a variety of compressed signals.
- Work published in the Allerton Conference on Communication, Control, and Computing.

<b>Computer Science Tutor and Grader</b> <i>Harvey Mudd College, Claremont, CA</i>	September 2013 - May 2014
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<b>Computer Science Intern</b> <i>Harvey Mudd College, Claremont, CA</i>	June 2013 - August 2013
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- Worked in a team of 3 to improve the introductory computer science class.
- Created a homework submission site with an autograding feature using Django Web Framework.
- Designed and wrote code for class lab assignments.

## PROJECTS

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<b>Mathematics Clinic</b> <i>Microsoft / Harvey Mudd College, Claremont, CA</i>	September 2015 - May 2016
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- Year long group senior project sponsored by Microsoft.
- Research, implement and develop anomaly detection algorithms for live site incident detection.
- Develop tests and comparison metrics for existing and new algorithms.

## ACTIVITIES

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<b>Windward Code Wars Participant</b> <i>Claremont, CA</i>	January 2013, 2014
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- Worked in a group of 4 to write a competitive path finding algorithm.