# George He

(408)731-0123 — 147 Connemara Way, Sunnyvale, CA — georgehe@berkeley.edu

**Education**

***University of California, Berkeley*** **8/2014 - 12/2016**
**Bachelor of Science in Electrical Engineering and Computer Science**
**GPA: 3.977/4.0**
Relevant Coursework: Algorithms for Computational Biology, Artificial Intelligence, Computer Security, Data Structures, Databases, Efficient Algorithms, Machine Learning, Machine Structures, Operating Systems

**Research Experience**

***UC Berkeley AmpLab*** **1/2016 - Present**
Adviser: Anthony Joseph, David Patterson
• Develop filtering and visualization techniques for Mango, a data visualization interface that allows ad hoc queries and modification on genetic data
• Applications of machine learning and distributed computing for Gnocchi, a project to determine phenotype-genotype associations - papers pending

***Machine Learning at Berkeley*** **1/2016 - Present**
• Conduct research in music recommendation using content-based analysis machine learning techniques
• Worked on improving featurization techniques through latent factor analysis and designing functional neural networks

***UC Berkeley URAP*** **8/2015 - 12/2015**
Adviser: Dawn Song
• Used machine learning to determine encrypted malware
• Focus on polymorphic code analysis and detection of common encryption techniques

**Presentations**

**Improving Music Recommendation: Featurizing Audio** **5/2016**
UC Berkeley Undergraduate Research Symposium
**Mango: Data Exploration on Large Genomic Datasets** **5/2016**
UC Berkeley Undergraduate Research Symposium

**Honors/Awards**

**American Statistical Association Datafest Overall Winner** **3/2016**
**Cal Alumni Association Leadership Award** **8/2014**
**National Merit Scholar** **8/2014**

**Teaching Experience**

**Course Reader - Lab Assistant** **Spring 2016**
EE16B Designing Informational Devices II, UC Berkeley
**Lab Assistant** **Spring 2015**
CS61A Structure & Interpretation of Computer Programs, UC Berkeley

**Industry Experience**

***Software Engineer Intern*** **5/2016 - 8/2016**
**Google Inc, Mountain View, CA**

• Developed with: Golang, Polymer, C++, AngularJS, Javascript, Borg
• Search Indexing - Create experiment pipeline tools for machine-learning focused tests

***Data Science Consultant*** **1/2016 - 5/2016**
**Grand Rounds, San Francisco, CA**
• Developed with: Python, AWS, Spark
• Analysis of health care data to detect important signals in predicting patient cared tests using PCA, SVMs, and decision trees

***Software Engineer Intern*** **5/2015 - 8/2015**
**Google Inc, Portland, OR**
• Developed with: Dart, Python, Polymer, Google App Engine
• Lead project to create https://dartpad.dartlang.org
• Conducted UX and usability research in London

***Engineering Intern*** **6/2014 - 8/2014**
**Audience Inc, Mountain View, CA**
• Developed with: Python, Java, Android SDK, Robot
• Host software deployment - ensuring compatibility on eS704 and eS774 chips

**Projects**

***UC Berkeley Statistics DataFest*** **April 2016**
**Best in Show — Overall Winner**
• Apply machine learning and statistical models to predict TicketMaster data

***Sentiment Chat*** **October 2015**
**CalHacks 2015 — Moxtra API Winner**
• http://devpost.com/software/sentiment-chat
• Natural language processing and analysis of message sentiments

***3D Modeling - Microsoft Kinect*** **January 2014**
**Carleton College**
• https://github.com/Georgehe4/kinectproject
• Creation of navigable 3D point cloud using C++, Microsoft Kinect & OpenGL libraries sentiments

**Societies and Organizations**

American Statistical Association, *Member* 2/2016 - Present
Tau Beta Pi, *Member* 1/2016 - Present
Eta Kappa Nu, *Bridge Officer (Historian)* 1/2015 - Present

**Technical Skills**

*Experienced:* Python • Java • C • C++ • Javascript • Dart • Scala • Go
*Familiar:* MySQL • Swift 2
*Frameworks:* Apache Spark • Apache Hadoop • scikit-learn • TensorFlow

**Languages**

*Fluent:* English, Chinese (Mandarin)
*Proficient:* Spanish