

Howard Lan

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Education **Rice University** Houston, TX
Master of Computer Science (Data Science Specialization), 3.82 /4 Graduating June 2021
• Coursework includes algorithms, machine learning, data visualization, oop programming, cloud computing, databases, computer systems, and more. Rice D2K lab data science consultant.

The University of Texas at Austin Austin, TX
Bachelor of Science in Mathematics (Scientific Computing Specialization), 3.60 /4 Aug 2014 – Dec 2018
• Coursework focused in statistics, applied math, scientific computing, and user experience.
• Activities: intramural soccer, math club, texas advanced computing center volunteer.

Experience **Rice University** Houston, TX
Graduate Teaching Assistant Spring 2021
TA for Dr. Mike Fagan's COMP 680: Statistics and Data Science.
• Led virtual discussion and office hours for a class of around 15 students.
• Designed questions for problem sets, exams, and wrote solutions.

Cirrus Logic Austin, TX
Data Science Intern (Product Engineering Team) Summer 2018
Semiconductor company that designs audio products for companies like Apple and Samsung.
• Developed a web app (using R, Shiny framework), from conception to completion, to analyze silicon wafers and help engineers visually monitor false holds/false releases rates based on wafer bin limits.
• Consulted with product engineers, database administrators, and statisticians to design UI.
• Improved the speed of markov chain monte carlo algorithm greatly by using Rcpp and C++.
• Wrote complex SQL queries to retrieve silicon wafer data from Oracle database.
• Analyzed silicon wafer data using Python and Excel.

SAS Institute Cary, NC
Software Developer Intern (Visual Analytics Team) Summer 2016 and 2017
Analytics software company that provide a suite of software to help analyze, manage, and report data.
• Fixed over 30 high priority UI defects and worked on features in SAS Visual Analytics working with JavaScript/TypeScript, HTML, CSS, jQuery, and OpenUI5.
• Presented poster of summer work at intern expo to other interns and company leaders.
• Participated in A/B testing to help improve product usability.
• Collaborated with software developers, testers, managers, ux designers, and technical writers.

The University of Texas at Austin Austin, TX
Research Assistant (Linguistics Department) Spring 2017
Member of a research group that focused on analyzing mixed language documents.
• Refactored Python code to improve maintainability.
• Increased the time to process large corpora significantly by using Python multiprocessing.
• Created visualizations and plots in R.

Skills **Languages:** Python, R, Java, HTML, CSS, C++, SQL.
Big Data Tools: Hadoop, Spark, Hive.
Data Visualization: Python (Matplotlib, Plotly, Seaborn), R (ggplot, Plotly), Tableau.
Database Management Systems: MySQL, Oracle, MongoDB.