

# **Ruotian Gao**

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## **EDUCATION**

### **University of California, San Diego**

B.S. in Data Science, Halıcıoğlu Data Science Institute  
Major: Data Science

*La Jolla, CA  
Sept. 2017- June 2021*

## **INTERNSHIP EXPERIENCE**

### **Collaborated Project by CR Power & Siemens**

*Data Analyst Intern*

*Nanjing, China  
July 2019- Aug. 2019*

- ✧ Applied machine learning and deep learning in python, especially the GVM algorithm and the SVM algorithm to analyze the data from the devices in CR Power's thermal power plants like temperature of the gas turbine, air volume per second, etc. All the APIs were provided by Siemens.
- ✧ In this internship, my job was to convert the raw data generated from the devices in the fuel station into analyzable data and monitored the condition of the equipment, use machine learning to predict all possible malfunction and schedule maintenance accordingly.

## **PROJECTS AND RESEARCH EXPERIENCES**

- ✧ Built a restaurants database from a csv file using SQL, in this project, I designed the functional dependencies between each attribute and can perform efficient searching using queries.
- ✧ Investigated the relation between diet and death from 1900 to 2015, examined the clinical trials from the Minnesota Coronary Experiment and run a hypothesis test on them.
- ✧ Programmed a Planet revolution simulator with Java to take the users' input of planets' mass, volume, coordinates to show its orbit with pictures and sound
- ✧ Self-taught Swift language, wrote a simple version of Twitter, and a cinema information query application
- ✧ Used C++ and SDK from Intel to write telemetry program to collect computer hardware information, which could collect battery, hardware, program and user waiting information and generate database and Excel files
- ✧ Big data analyze experience: using Dask to analyze data provided by Intel, and build machine learning models with datasets over 150G.
- ✧ My GitHub repositories: <https://github.com/RoyGRT?tab=repositories>

## **SKILLS**

- ✧ Language Skills: Java, Python, C, C++, Swift, Html, JavaScript
- ✧ Data Analysis & Visualization Tools: Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, Beautiful Soup, Dask, AWS
- ✧ Proficient in: R, JMP, Visual Studio, MATLAB, XCode, Microsoft Office, Photoshop, data wrangling, web scraping, machine learning