

Contact

www.linkedin.com/in/michael-liu-446965196 (LinkedIn)

Top Skills

Git

Python (Programming Language)

Scala

Michael Liu

Seasoned data engineer with passion in big data, data analysis, machine learning, and programming

Orange County, California Area

Summary

Experienced Big Data Engineer/Scientist with a demonstrated history of working in the internet industry. Skilled in Python, Machine Learning, TensorFlow, Data Analysis, and Scala. Strong communication, problem solving, and project management skills.

Experience

Hulu

Big Data Engineer

May 2019 - Present (11 months)

Santa Monica

- * Performed data transformation, analysis, and validation using Python, Presto, Hive, Snowflake, and Scala, serving internal teams at Hulu
- * Successfully finished the project of personal information nullification across over 100 tables in big data database
- * Created new pipelines and maintained current pipelines to satisfy different business needs including ads, subscription, revenue, etc.
- * Served internal teams for ad-hoc requirements including updating business logic in pipelines, investigating discrepancies in data tables, etc.

Rayton Solar

Chief Scientist

October 2016 - December 2018 (2 years 3 months)

Santa Monica

- * Led a team of 5 engineers on developing state-of-the-art proton implanter and ion-cutting processes
- * Extensive experience in managing multiple projects and cross-functional teams
- * Created company roadmap and worked with CEO on fund raising from private investors and public

Arzon Solar, LLC

Sr. Engineering Manager

April 2009 - October 2016 (7 years 7 months)

Torrance

- * Oversaw all aspects of new product development and engineering including design, simulation, prototyping, validation, pilot production, and parts sourcing/supplier development
- * Routinely collected, transformed, and analyzed various data from experiment and manufacture
- * Created a non-linear regression model to predict energy generation for solar project development
- * Automated statistical analysis and anomaly detection of real time data from a 40MW solar power plant
- * Created pre-failure detection method to identify problematic systems through data analysis and mining
- * Built a physics-based parametric model to predict electro-optical and thermal performance of solar cells
- * Achieved the solar module efficiency world record through design optimization and innovation
- * Established relational database to link fabrication and testing data for data analysis using MS Access
- * Frequently presented data analysis and innovation progress to executives, investors and industry peers
- * Held progressive roles from Head Process Engineer to Sr. Manager

Education

University of Virginia

Doctor of Philosophy - PhD, Electrical and Electronics
Engineering · (2006 - 2008)

The University of Texas at Austin

Master's degree, Electrical and Electronics Engineering · (2002 - 2005)

Peking University

Bachelor's degree, Physics · (1998 - 2002)