RUN **CHEN**

Redmond, WA 98052 · (765) 269-6609 · BigRunTheory@Gmail.com
Feel free to check my personal website: https://bigruntheory.github.io/

SKILLS

- Python, PySpark, C
- Language Models, Generative AI
- (Machine Learning/AI) System Design
- Machine Learning, Deep Learning, Reinforcement Learning
- Data Analysis, Statistics, Data Structure and Algorithms
- Decision Science, Math Programming
- Cloud Service, Online Business, Ads

EXPERIENCE

OCTOBER 2022 – PRESENT

DATA & APPLIED SCIENTIST, *MICROSOFT, REDMOND, WA*

I have primarily worked on delivering intelligent solutions to demand forecasting and capacity planning for Microsoft Azure. By leveraging my expertise in data science, machine learning, and artificial intelligence, I have helped the company reduce CAPEX and provide better cloud services globally.

- Delivered monthly publications of demand forecasts for Azure E&D.
- Developed and implemented optimized inventory buffer solutions for Azure data centers.
- Currently working on developing optimal solutions for rack planning constrained by power, components and budget.

SEPTEMBER 2021 – OCTOBER 2022

MACHINE LEARNING ENGINEER, *POINTSBET, DENVER, CO*

- Developed and deployed recommendation engines on Azure to generate customized feed pages, significantly boosting customer engagement in sports betting by leveraging collaborative filtering to analyze cross-sport user behavior.
- Developed and deployed fully automated detection systems on Azure to identify anomalies, fraudulent transactions, and promotional abuse, with real-time alerting to operational teams.

MAY 2018 – AUGUST 2018

RESEARCH ENGINEER INTERN, *YAHOO!, SUNNYVALE, CA*

Developed a recommender system for targeted advertising using factorization machine models trained on extremely sparse user segmentation data.

MAY 2017 – AUGUST 2017

STATISTICAL GENETICS & DATA SCIENTIST INTERN, *MONSANTO, CHESTERFIELD, MO*

Developed an intelligent optimization solution to assign donors for improved trait integration quality and won a Monsanto Contribution Prize.

EDUCATION

DECEMBER 2020

PH.D.- OPERATIONS RESEARCH, *PURDUE UNIVERSITY, WEST LAFAYETTE, IN, USA*

My research focuses on developing fundamental distributed algorithms for solving large-scale optimization problems with applications to energy systems and machine learning models.

JUNE 2011

B.S.- THEORETICAL PHYSICS, *UNIVERSITY OF SCIENCE AND TECHNOLOGY OF CHINA*

RECENT PUBLICATION

- **My Google Scholar Profile**