# Sihao Chen (Benny)

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# **EDUCATION**

# University of California, Berkeley

Berkeley, CA

M.Eng. in Electrical Engineering and Computer Science, GPA: 3.99/4 Aug. 2020-May 2021 Coursework: Efficient Algorithms and Intractable Problems, Deep Learning, Advanced Robotics, Computer Security, Principles and Techniques of Data Science, Applications of Parallel Computers

# Northeastern University

Shenyang, Liaoning, China

B.Eng. in Software Engineering, GPA: 3.95/4

Sep. 2016-June 2020

National Scholarship, First Prize in Contemporary Undergraduate Mathematical Contest in Modeling Coursework: Software Engineering, Data Structures and Algorithms, Computer Networks, Introduction to Database, Principles of Computer Organization, Object-Oriented Programming and Design

#### PROFESSIONAL EXPERIENCE

### Sr. Software Engineer at LinkedIn, San Francisco, CA

Oct. 2021-Present

- Designed and implemented RESTful APIs using Java, Rest.li, Oracle, MySQL, and graph databases to enable ad content management, billing configurations, customer verification, and permission control, supporting enterprise users in managing millions of ad campaigns, pages, and account users at high transaction frequency.
- Led a team in developing distributed financial data processing workflows using Samza, Spark, Hadoop, and Airflow, ensuring billing accuracy, timeliness, and resilience to data inconsistency and loss.
- Developed a machine learning-based customer credit score calculation pipeline using XGBoost and integrated prediction scores into ad serving systems with Flyte, optimizing spending and preventing fraud.

# Software Engineer at Tesla, Fremont, CA

June 2021-Oct. 2021

Developed the acquisition management platform using Java Spring and C# ASP.NET. Improved the stability and response time of the used car valuation service.

#### Research & Development Intern at Microsoft, Beijing, China

Jan. 2020-June 2020

Designed and implemented a document match plan generation algorithm for the Bing search engine based on deep reinforcement learning, improving the match plan's performance by 57.03%.

#### **PROJECTS**

# Assistive Technology for Navigation, Selection, Pointing, and Clicking in a Mouse-free Environment, UC Berkeley Sep. 2020-May 2021

Designed and implemented a program that controls computer cursors using real time video input with hand gesture recognition.

# Teaming Platform, UC Berkeley

Sep. 2020-May 2021

Developed a website that generates customized surveys, accepts survey responses, and generates response analysis using React.js, Firebase, and Cloud Functions, served on Google Cloud Platform.

## **SKILLS**

**Programming** Python, Java, Scala, JavaScript (Node.js), MATLAB, C, C++, C# (.NET), SQL, Go, HTML, CSS, LaTeX, Linux/UNIX Script, AWS, GCP, Git, Gradle

Language Fluent in Mandarin Chinese and English. Learning Spanish and French.

#### **PUBLICATIONS**

Match Plan Generation in Web Search with Parameterized Action Reinforcement Learning. *Proceedings* of the Web Conference 2021. April 2021