## Sihao Chen (Benny)

sihao@berkeley.edu \( \phi \) sihao.dev \( \phi \) Oakland, CA, 94607 \( \phi \) (917) 288-2594

#### **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

#### Software Engineer, LinkedIn, Sunnyvale, CA

Oct. 2021-Present

Working in the Streamlined Buying team. Responsible for improving the purchase experience for agencies, partners, and customers.

## Software Engineer, 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.

Full-Stack Software Engineer, University of California, Berkeley, CA Sep. 2020-May 2021 Developed a platform that analyzes student survey data and gives report using React.js and Firebase. Designed a NoSQL database schema for storing student data using Cloud Firestore.

#### Research & Development Intern, 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%.

#### Project Intern, University of California, Berkeley, CA

Feb. 2019-Mar. 2019

Worked on a joint project with Uber on mobility modeling supervised by Professor Alexandre Bayen. Tested a transportation optimization system, visualized and analyzed data on transportation statistics.

### **PROJECTS**

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

Capstone project supervised by Professor Brian A. Barsky at University of California, Berkeley Designed and implemented a program that controls computer cursors using real time video input with hand gesture recognition.

#### Interactive Prediction using Imitation Learning

May 2019-Sep. 2019

Supervised by Professor Masayoshi Tomizuka at MSC Lab, University of California, Berkeley Implemented an integrated interactive traffic visualization tool based on Uber AVS. Built an imitation learning model for trajectory prediction using PyTorch and OpenCV.

#### **SKILLS**

Programming Python, Java, JavaScript (Node.js), MATLAB, C/C++, .NET C#, SQL (MySQL/Oracle), Go, HTML, CSS, LaTeX, Linux/UNIX Script, AWS, Git, NoSQL, ROS, CUDA, MPI, OpenMP Language Excellent Chinese and English communication skills, both written and verbal

#### **PUBLICATIONS**

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