Sihao Chen (Benny)

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EDUCATION

University of California, Berkeley Berkeley, CA
M.Eng. in Electrical Engineering and Computer Science *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, Tesla, Inc., Fremont, CA *June 2021-Present*
Developing the acquisition management platform using Java Spring and ASP.NET.

Full-Stack Software Engineer, UC Berkeley, 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 Research, 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, UC Berkeley, 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.

Software Engineering Intern, Zhuomo Group, Beijing, China *Aug. 2018-Aug. 2018*
Implemented a RESTful API for smartwatch using Java, Docker, Jenkins, Nginx, and Nexus3.

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, UC Berkeley, Berkeley, CA
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, MSC Lab, UC Berkeley, Berkeley, CA
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