Wu Bocheng

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EDUCATION

Carnegie Mellon University **Pittsburgh, Pennsylvania** **Sept. 2023 – Dec. 2024**

- Master of Information Technology Strategy, Software and Networked Systems Concentration

Xi'an Jiaotong University **Xi'an, China** **Sept. 2019 - Jun. 2023**

- Bachelor of Engineering in Big Data Management and Application; **GPA:** 3.81; **Ranking:** 6/172.
- **Honors:** XJTU Outstanding Student Leader and Outstanding Student

Courses

- **System:** Computer System, Data Structure, Database, Parallel Computing, Data Science and Big Data
- **Algorithm:** Machine Learning, Deep Learning, Reinforcement Learning, Social Network Analysis
- **Mathematics:** Convex Optimization, Statistics, Linear Algebra, Probability Theory

EXPERIENCE

Microsoft, Cloud+AI of Azure, *Software Development Engineer Intern* **Shanghai, China** **Jan. 2023 – Jun. 2023**

- **ChatGPT Integration:** [Demo] Integrated ChatGPT with Azure's CLI tool, customize generative models with specified data, enabling users to effortlessly control Azure cloud resources using natural language generated CLI script.
- **Python Debugging and Git :** Completed more than 25 issues on Azure CLI, ranging from adding new features and improving automated testing to fixing tricky bugs. Reducing the average issue resolution time from 45 days to 37 days.
- **Recommendation System:**Developed and launched a CLI plugin to provide command and scenario recommendations for users. The system increases the average speed of writing CLI commands by 40% according to the survey.

Volkswagen, *Data Analytics Intern* **Shanghai, China** **Jul. 2022 – Sept. 2022**

- **API Interface and Web Development:** Build data panels and Statistical Process Control algorithms with Vue.js and Django. Achieved automatic monitoring and predictive warning of automobile fluid refilling failures on the production line, increased the yield rate by 3% and reduced downtime by more than 5 hours on average every month.
- **Pyspc Repo:** [Demo] Contribute to the pyspc repo, add Pearson III distribution to fit the skewness info of the data.

Automated Office System, *Independent Project* **Website** **Jan. 2020 – Present**

- Leveraging software development capabilities for the transformation of class management, constructing a class website to disseminate information and automate assignment submission and distribution.Integrating with WeChat for the collection and dissemination of course notifications, establishing web crawlers to procure and distribute test scores.
- These various small-scale individual projects together constitute a rudimentary Office Automation System. This system has effectively mitigated 60% of redundant administrative tasks associated with class management.

Optimal Scheduling Strategy for PSIC, *National innovation project* **Xi'an, China** **Jan. 2021 – Apr. 2022**

- **Optimization:** Proposed an optimal scheduling strategy for PSIC (Photovoltaic Storage Integrated Charging Stations. Reduced the peak-to-valley difference of load and suppressed the load fluctuation of the PSIC to the grid. Reduced the electricity capacity requirement by 30%.

Recommendation System on FedLinUCB, Research Assistant **Xi'an, China** **Jan. 2023 – Jun. 2023**

- **Reinforcement Learning:** Combines the privacy-preserving capabilities of federated learning with the personalized recommendation capabilities of Multi-armed Bandits models, reducing server and communication costs by over 50% while performing similarly to traditional recommendation algorithms.

China Mobile, *Big Data Mining and Analytics Intern* **Jiangsu, China** **Jun. 2021 – Jul. 2021**

- **NLP:** Build a call center call classification system, which uses Natural Language Toolkit to analyze the reasons and appeals of the calls, and transfer them to the correct business department.

State Grid Corperation of China, *Machine Learning Intern* **Jiangsu, China** **Jan. 2021 – Feb. 2021**

- **Prediction:** Selected bidirectional LSTM model for the highly periodic nature of the power load, reached an accuracy of 92% on the test set. Improved the LSTM model into an online learning approach, using the RTRL algorithm for optimization.

SKILLS

- **Language:** Python, java, C, php, html, Spark, SQL, R
- **Tools:** Git, Linux,GDB, Pytorch, Hadoop, scikit-learn, TensorFlow, Vue.js,
- **Engineering capacity:** API interface construction, Full-stack development, Distributed and parallel computing, NLP
- **Algorithms:** Machine Learning, Deep Learning, Reinforcement Learning, Convex Optimization, Social Network