ZHIHAO WANG

I am looking for Software Engineer positions that start in the January 2023 timeframe.
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EDUCATION

Carnegie Mellon University   Pittsburgh, Pennsylvania, United States
Master of Software Engineering   Aug 2021 – Dec 2022 *(expected)*
- Selected courses: Introduction to Computer System

China University of Mining and Technology, Beijing   Beijing, China
Bachelor of Science in Information and Computing Science   Sept 2013 – June 2017
- Selected courses: Advanced Algebra, Probability Theory, Discrete Mathematics, Data Structures and Algorithms, Operations Research, Mathematical Modeling, Database Theory, Object-oriented Programming and Applications

Peking University   Beijing, China
Bachelor of Economics   Sept 2014 – July 2017
- Ranked 33rd among 2000+ applicants in the program entrance exam and received The Second Prize Scholarship.
- Selected courses: Econometrics, Intermediate Microeconomics, Intermediate macroeconomics, Game Theory

PROFESSIONAL EXPERIENCE

App Annie   Beijing, China
Senior Backend Software Engineer & Scrum Master   Feb 2018 – July 2021
Responsible for the technical design, development and maintenance of first-party data platforms that help customers manage apps' downloads, revenue, usage and advertising data.

- **Scrum & Agile Project Management**
  - Led a Scrum team of 6+ and facilitate the team's progress toward team goals.
  - Coordinated with external teams including Product, Technical Operation, Support in different time zones, and host sprint planning meetings, daily Scrum meetings to manage project, and retrospectives to help the team locate issues.
  - Skilled in using project management tools for tracking progress and quantitative analysis.
- **Connection Workflow**
  - Transformed Connection Workflow by migrating and refactoring connection workflows of 30+ platforms from monolithic app to microservices as technical designer and developer.
  - Significantly improved user experience by reducing time cost and improving success rate by 30%, as well as enhancing internal monitoring and troubleshooting tools.
- **Connect Universal Dashboard**
  - Migrated the 9-year-old legacy product from a Django monolithic app to microservices architecture (Flask).
  - Built data services on top of apps' sales, usage and advertising data stored in PostgreSQL & MongoDB.
- **Google Firebase Integration**
  - Designed the Firebase user authentication with Google 2-Step Verification, browser-based scraping tasks, ETL processes and backend service for data visualization and data delivery.
  - Implemented the workflow of user authentication and scraping tasks for CSV report download, making App Annie the first company to support Firebase integration in the industry at that time.
- **App Store Source Analysis Report**
  - Implemented scraping tasks for new source of data from Apple Store Connect and Google Play Store, and updated backend services to support new source of data.
  - Learned React from scratch and built a new visualization report within 4 weeks.
- **Best Engineering Excellence Award in App Annie Hackathon**
  - Built a live demo of *App Annie Distributed Configuration Management System* within days.
  - The app allows engineers to easily manage service configurations of various environments with user-friendly UI, which is helpful for project management, auditing and debugging, increasing efficiency, stability and visibility into changes that occur in an application.
- **App Annie Ascend Hybrid UI**
  - Built *App Annie Ascend* user interface from scratch using React including dashboards, connection management, user management using React, during which I worked as a Full-Stack Software Engineer with multiple teams in Vancouver, San Francisco and Brazil.

VIPKID   Beijing, China
Backend Software Engineer   July 2017 - Feb 2018
- **Dino English App & WeChat Platform**
  - Built backend services for VIPKID Dino English App and its WeChat platform in Flask.
  - Established an asynchronous task system based on Celery from scratch for updating students' statistical data.
- **VIPKID Song App & VIPKID School**
  - Built backend services for VIPKID Song App and VIPKID School in Sprint Boot.
  - Designed and developed core business logic of learning resource management and course booking management.
  - Constructed micro-services architecture for backend service migration from a monolithic app.

VIPKID   Beijing, China
Backend Software Engineer Intern   Aug 2016 - July 2017
- Supported VIPKID's core business, including parents booking courses, students downloading learning materials, etc., for iOS/Android applications based on Python, gRPC framework, Protocol Buffers.
- Built an internal ticket system to help send request for application change, database change, testing.

ADDITIONAL PROJECTS

Peking University Course Trading Market   Beijing, China
Founder & Developer   Dec 2016 - Feb 2018
- Developed a third-party information exchange platform to facilitate course swapping among undergraduate students at the National School of Development at Peking University.
- The emergence of this market made a splash and "daily site visits to the market surged to 4,000 and peaked at 6,000 when the class dropping and re-selection period began," *Peking University Student Opens Course Trading Market* reported.

CHARLS & Socio-economic Survey Data Analysis   Beijing, Shandong & Tianjin, China
Interviewer & Researcher   May 2015 - Dec 2015
- Collected microdata in the field via interviews for the *China Health and Retirement Longitudinal Study* to serve the needs of scientific research on the elderly.
- Analyzed collected data using Stata, and published a paper, Zhihao,Wang., and Xinheng, Wu. (2016, September 14). Factors affecting people over the age of 45 participating in the new rural pension. Global Market Information Guide, 2016(25), 15-16.

COURSE CERTIFICATES

Neural Networks and Deep Learning	deeplearning.ai
Structuring Machine Learning Projects	deeplearning.ai
Improving Deep Neural Networks	deeplearning.ai
Introduction to Recommender Systems	University of Minnesota
HTML, CSS and JavaScript	HKUST
Machine Learning	Stanford University
React: The Complete Guide (incl Hooks, React Router, Redux)	Udemy
Go: The Complete Developer's Guide	Udemy

SKILLS

Programming Languages: Python, Javascript, Java, SQL
Data Storage: MySQL, PostgreSQL, MongoDB, Redis, Amazon S3, Snowflake
Frameworks: Flask, Django, React, Springboot
DevOps: Docker, Sentry, Kibana, New Relic, Datadog
Project Management: Jira, Trello, Asana, G Suite
Languages: Native proficiency in Mandarin and full professional proficiency in English