ZHIJIA CHEN, PH.D.C

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SOFTWARE ENGINEER

Dynamic **Software Engineer** with the academic background and proven work ethic. Proficient in data science, analytics tools, system development, networking technologies, coding, and more. Collaborate with all staff in achieving and surpassing objectives. Exemplary academic qualifications include a forthcoming Ph.D. in Computer and Information Science from Temple University.

Core Competencies

Software Engineering | Data Science | Project Management | Coding | Systems Development | Databases | Networking
Troubleshooting | Process Improvement | Statistical Methods | Complex Problem-Solving | AI & ML
Team Collaboration | Communication & Reporting | Research & Analysis | Analytics | New Technologies | Data Modeling

PROFESSIONAL EXPERIENCE

Fujian-HIT Research Institute, Quanzhou, China 2016 – 2017

Software Engineer

Produced software to solve business problems and drive process improvement.

- Developed a distributed product serial number generation system for automatic packaging lines using C# and MySQL database that was used as a template for other automation projects.
- Created a 3D data visualization module to help analyze the plantar pressure data using Qt Data Visualization library.
- Built a foot region classifier for automatic foot plantar segmentation and plantar pressure distribution calculation, maintaining team collaboration to achieve deadlines and remediate issues.

RESEARCH EXPERIENCE

Temple University, Philadelphia, PA 2017 – Present

Research Assistant

Handled research covering User Comments Crawling, Data Mining, Software Defined Networking (SDN), and Automating SDN Composition. Produced accurate reporting and adhered quality requirements.

- Developed a universal user comment crawler that works on any news website.
- Provided essential contributions in the Ravel project (an open source SDN controller) and added a new topology feature that enables the system to start with Mininet custom topology.
- Implemented BGP controller upon Ravel using data integrity constraints for representing and reasoning about BGP policies.

EDUCATION

Temple University, 2023 (expected)
Doctor of Philosophy (Candidate), Computer and Information Science (Computer and Network Systems)

Harbin Institute of Technology, 2016
Bachelor of Engineering, Information Engineering (Information Countermeasure Technology)

ADDITIONAL CREDENTIALS

Publications

Wang, A., **Chen, Z.,** "Internet Routing and Non-monotonic Reasoning", LPNMR 2019
Wang, A., **Chen, Z.,** Yang, T., & Yu, M. "Enabling Policy Innovation in Interdomain Routing: A Software-Defined Approach", SOSR 2019

Technical Skills

Languages: Python, C/C++, SQL, MATLAB, C#, JavaScript
Tools/Frameworks: Git, PyTorch, .NET, Qt, Rally (CA Agile Central), Selenium, Docker, AWS

Selected Projects:

Universal Comment Crawler (Python, Selenium, JavaScript) / Ravel: A Database-Defined Network (Python, SQL) / Urban Sewage Online Monitoring System (C#, JavaScript, SQL) / Distributed Labeling System for Automatic Packaging Line (C#, SQL) / Foot Plantar Pressure Measurement System (C++, SQL)