Danni Shi

585-520-5002 dannishi.me@gmail.com dannishi.me github.com/DanniBot

Education

University of Rochester **Sep. 2021 - Dec. 2022**
M.S. in Computer Science (GPA: 3.9/4.0) *Rochester, NY*

- Relevant courses: Collaborative Programming & Software Design, Human Computer Interaction, Computer Networks

Central South University **Sep. 2016 - Jun. 2020**
B.S. in Intelligence Science and Technology (with Honors) *Changsha, China*

Technical Skills

Languages: Python, JavaScript, Rust, C, Haskell, Shell, SQL, HTML/CSS
Frameworks & Libraries: Django, Flask, jQuery, Jinja, Bootstrap, NumPy, Pandas, PyTorch, scikit-learn
Database & Other: MySQL, Postgres, MongoDB, Git, Heroku, Linode, AWS, Postman

Projects

Multi-vendor Restaurant Marketplace Website | GitHub link **August 2022**

- Developed a full-stack online food-ordering system with **Django** and **Postgres** for the backend, **HTML/CSS**, **Bootstrap**, and **JavaScript** for the frontend, and deployed it on **Linode** with **gunicorn** and **nginx**
- Implemented RESTful APIs with Python to support **CRUD** operations so that vendors can manage their menus
- Utilized **GeoDjango** and **Google Map APIs** to support showing nearby restaurants and location-based search
- Constructed **jQuery AJAX** widgets for features such as the shopping cart to render data in a more user-friendly way
- Built email verification for account activation and password reset, and optimized checkout process with email notification by using django.core.mail module

Online Course Registration System | GitHub link **July 2022**

- Developed a full-stack web-based course registration system using **Flask** framework, and deployed it on **Heroku**
- Built a NoSQL cloud database **MongoDB Atlas** to manage student and course information
- Created RESTful APIs with **Flask-RESTPlus** to support CRUD operations, and tested the APIs with **Postman**

Command-Line To-Do App | GitHub link **June 2022**

- Built command-line interfaces with **Typer CLI** in **Python** to take and process commands, options, and arguments
- Utilized namedtuple and dictionaries to handle the to-do data, and **JSON** files to manage persistent data storage
- Applied test-driven development by writing unit tests for every feature using **pytest** and Typer's **CliRunner**

Distributed Version Control System in Rust **Oct. 2021 - Dec. 2021**

- Designed and developed a fully functional DVCS in group using **Rust** and scored higher than 90% students in class
- Handled writing and reading files operations by serializing and deserializing JSON data with Rust's SerDe framework
- Implemented interfaces for *clone*, *push*, and *pull* to transfer files by integrating Linux rsync commands into Rust code
- Created all the unit tests in Rust and integration tests in **shell** to troubleshoot the system and enhance error handling

Experience

Product Manager Intern **Mar. 2021 - Jul. 2021**
NIO, Inc. digital cockpit team *Shanghai, China*

- Defined detailed product requirements for **6** core features for the software system of the NIO ET7 model
- Collaborated with engineers and QA to understand constraints, identify solutions, and ship features regularly
- Worked closely with UI/UX to set the direction for the HMI design of the multi-display digital cockpit driving experience

Research Assistant | Paper **Jul. 2019 - Jun. 2020**
Intelligent Learning and Optimization Laboratory, CSU *Changsha, China*

- Cleaned and preprocessed 66,706 entries of raw data collected from patients' IVF medical examination results using **Python**
- Assisted in building 6 classification models with **scikit-learn** to predict early pregnancy loss after IVF-ET. The one predicted with the highest accuracy was Random Forest, of which the recall ratio and F1 could reach 97%