Guang.Yang003@umb.edu

Guang Yang

GHC 19 student scholar 2020 Summer intern

70 Pacific St, Cambridge, MA

GitHub | Portfolio(all details)| LinkedIn

Expect graduate on June. 2021

SKILLS

Programing: Python, JavaScript, HTML, CSS, Vue.js, Node.js, jQuery, MySQL, Oracle, Java, C, PHP **Tools:** Selenium WebDriver, Jenkins, Jira, JMeter, Postman, Docker, Linux/Unix, REST API MS Office

EDUCATION

University of Massachusetts | Master of Science | Computer Science

09/2019-06/2021

Key Coursework: Analysis of Algorithms, Database Application Development, Database-Backed Web Services, Compilers

Huazhong University of Science and Technology | Bachelor of Eng. | Telecommunications Engineering

09/2015-06/2019

Key Coursework: Computer Programming in C, Java Programming, Computer Networks, Analog Circuit and Digital System

EXPERIENCE

Full-Stack Website Developer | MIT Biomedical Optical Imaging and Biophotonics Group (on construction)

12/2019-2/2020

- Designed the outline and interaction by Adobe XD in 6 pages and presented demo to group members to gather comments in 2 days
- Developed the front-end of the user-friendly website by HTML and CSS in Vue.js framework
- Established the back-end successfully by Node.js and connected to the database by MySQL
- Implemented an internal management system by ajax request and trained 10 group members in updating, and posting operations

Software Developer Intern | Shanghai ByteDance Technology Co., Ltd.

03-08/2019

— Software Developer:

- Designed automated test cases and test libraries using Selenium WebDriver and JMeter, performed gray box testing
- Built a continuous platform by Jenkins in JAVA for automated testing in the large-scale system in Agile software development method
- Implemented automated test evaluation through multi-process in Python and achieved 16 times acceleration on 1.4 billions of data
- Tested various algorithms in OCR text recognition, image recognition and data mining, reduced 5 times manpower in 3 systems
- Collaborated with business team and delivered with high quality 6 public web services in the agile software development

— Data Analysis:

- Built several pipelines on Linux using MySQL and Python for data wrangling, supporting large-scale data mining and analysis
- Analyzed structured data and employed OpenCV for deliverable data visualization to development team

Research Intern | Electromagnetic Compatibility Lab, Missouri University of Science and Technology

07-10/2018

- Led the research of the world's leading technology, Emission Source Microscopy, and composed research report
- Designed SLAM algorithms on Robot Operating System (ROS) to realize efficient 3D map reconstruction and real-time positioning by using Kinect V2, and achieved 0.2 cm positioning accuracy, **related paper is submitted**.
- Implemented MATLAB programs and GUI for robust data collection from Vector Network Analyzer and source microscopy

COURSE PROJECTS

Full-Stack Developer | CS637-Database-backed Websites and Web Services | Pizza shop website

05-09/2018

- Designed user interfaces, objects, actions and database structure and deployed the automated ordering system in MVC architecture
- Created and implemented centralize data management at server as admin functionality by PHP and converted data structures in JSON
- Deployed web service requests in JavaScript with jQuery and tested server using Curl in command line

Java developer| CS651-Compiler|Buiding a Java compiler totally from scratch

02-04/2018

- Built a Java compiler from scratch for a non-trivial subset of the Java programming language
- Developed the compiler pipeline of FSM file scanning, token parsing, semantic type-checking analysis and code generation to compiler a source file into JVM bytecode and runnable

ENTREPRENEURSHIP

Web Developer & Product Manager | Startup of Mental Pressure Manager

09/2017-03/2018

- Designed the product "Mental Pressure Manager", a biotechnology-based medical device detecting the psychological pressure
- Built the product community website in HTML, CSS and JavaScript, delivered the measurement and recommendations to customers
- Started up the Huace Kangnuo (Wuhan) Biotechnology Inc. for the product and participated roadshow to seek potential fund

PATENTS & PUBLICATIONS

- Indoor Positioning Method based on Weighted Surface Fitting from Crowdsourcing [P]. NO.: CN 109059919 A
- Radio Map Construction Method based on Virtual Source Estimation & Tra. Correction [P]. NO.: CN 108919177 A
- Indoor Localization Based on Weighted Surfacing from Crowdsourced Samples [J]. Sensors 2018, 18(9), 2990.SCIE. Microgrid Simulation System [J]. Electronic Engineering & Product World, Sep2018