PENG JIANG

Chengdu, Sichuan | +86 18581595078 |pengjiang0528@163.com | Web portfolio: peji8559.github.io

Education

M.S. Computer Science Aug 2020 - Dec 2021
Colorado State University CS Major GPA: 3.75
Bachelor of Science: **Computer Science and Mathematics** double major Aug 2016 - May 2020
University of Colorado Boulder CS Major GPA: 3.3

Skills

Programming languages: **Python**, **C++**, **JavaScript**, **PHP, Scala, Java, C# (on Unity), Shell**
Hands on experience with **TensorFlow, PyTorch** on **Neural Networks**, **Random Forest**, **Image Recognition** for machine learning, **Hadoop MapReduce, Spark RDD, Apache Storm** for big data, mini program development on WeChat using **JavaScript**, **WXML**, **WXSS** (very similar to HTML and CSS)
Self-taught **JavaScript (ES6+ , React, Reduct)**, **HTML5**, **CSS3**, **WXML**, **WXSS**, **MySQL**, **VBA**, **Photoshop CS6**, **Edius**
Knowledge of **Data Structure**, **Algorithm**, **Object-Oriented Analysis & Design**, **Artificial Intelligence**
Currently using **MobaXterm**, **Sublime Text**, **Jupyter Notebook**, **PopSQL**, **WeChat Web DevTools**, **VMWare**, **Linux**, **OS X**, **Windows 10**
Used to use **Code Blocks**, **Geany**, **Virtual Box**
Experienced with basic office tool: **G-suite, Microsoft Word**, **PPT**, **Excel** (primarily used during the internship in 2018)
Speaking English (good) and Chinese (native)

Work History

Web Developer & Server Administrator - Part-Time Feb 2019 - May 2020
University of Colorado Boulder – Physics Department Boulder, CO, USA

- Working on physicslearning.colorado.edu that instructors can request demos for their incoming lectures
- My job is to maintain the server including database updating, data uploading, system backup, binding website certificates, adding new features to the website and debugging if there are some issues etc
- Redesigned shopping cart page and added features that instructors could add demo to multiple sections
- Made administrators able to upload unlimited videos with the same format and fixed the layout problem
- Always communicate with the manager and instructors to make the website more user friendly
- Coding in PHP, JavaScript, HTML, CSS and MySQL

Data Analyst – Internship May 2018 - Jul 2018
Qianxingniwo Technology Co., Ltd Chengdu, Sichuan, China

- Collected accurate data of different types of digital point cards that our company currently didn't have and intended to invest.
- Analyzed the performance of those products on the market to help the company make decisions (change of price, selling units based on day/week/month, market demand).
- The manager commented my work was very useful and they created a position for after I left.

Projects

"Competitive Craig List Pricing" – a software gives suggested used car value Feb 2021 – May 2021
Colorado State University – Big Data team project Boulder, CO, USA

- We use a huge craigslist dataset from Kaggle.
- We use python to implement both data processing and deep learning neural networks.
- Created a UI for the users' input (car information) and provide output (suggested car price).
- Tried three different ways for calculations: local CPU, local GPU, multiple CPUs from lab machines.

"Analysis of Iowa Voting Trends to Predict Iowa's 2020 Election Results" – Election results predictions using big data and machine learning algorithms Sep 2020 – Dec 2020
Colorado State University – Big Data team project Boulder, CO, USA

The US election in 2020 is characterized by marked division between the Democrat and Republican parties. With each passing week, people's political convictions are strengthened. Therefore, for our project, we hope to develop an accurate model to predict this election's results. Specifically, we hope to predict the outcome of the 2020 election in Iowa as it pertains to the Presidency, the Governor, congressional seats, and other offices for which the candidates' political affiliations play a significant role. We will focus on the Democrat and Republican parties since they are the two most prominent parties in American politics. Furthermore, we will segregate our results by county, since the entire state of Iowa does not vote in a uniform manner.

"Zombie Island" – a 3D game made via Unity Oct 2019 - Dec 2019

University of Colorado Boulder – Object-Oriented Analysis & Design semester team project Boulder, CO, USA

- The player can move around, sprint, jump and shoot enemies.
- Used C# to achieve player controls, enemy management, shooting logic, Scene management etc.
- Game can be downloaded via my web portfolio with detailed information: peji8559.github.io

"Wifiology" – a tool to keep tracking wifi traffic in certain area Jan 2019 - May 2019

University of Colorado Boulder – Software Dev Methods and Tools class team project Boulder, CO, USA

"Is Norlin Library crowded now?" How can you answer that if you are not currently in Norlin Library? The answer is "Wifiology". We use a wifi adapter to fetch wifi traffic and analyze the data to estimate how many pcs are currently using wifi and that leads to approximation of people in that area.

- Users could register and log in to the website as normal user or admin (The website was closed a month ago)
- Normal users could check wifi status, connected pcs, estimation of people (crowded or not), list of users etc.
- Admin had access to more details such as database nodes, edit pages, user flow on the website etc.
- We used PostgreSQL, Node.js, Java, HTML, CSS, JavaScript to build both frontend and backend of the Website
- An Android app was also available but has less details and functions (more details in peji8559.github.io)