

Zijian Zhao

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EDUCATION

Master of Science in Computer Science, Northwestern University, Evanston, IL

Sep.2019 - Dec. 2020 (expected)

- GPA: 4.0/4.0

BSc in Computer Science, Peking University, Beijing, China

Sep.2015 - Jun. 2019

SKILLS

Programming Languages: C/C++, Python, Java, MySql, JavaScript(jQuery), html/css

Framework: React, Jenkins, AWS, Git, Django, PyTorch, Tensorflow

EXPERIENCE

Software Engineer Intern, Futurewei Technologies, Santa Clara

Jun.2020.-Sep.2020

- Worked on the Guaranteed Contract Traffic Allocation Optimization project in the Ads Team
- Used Graph Neural Networks to speed up Integer Programming solving process, got a better impression allocation rate than current HWM algorithm

Research Intern, Institute of Software, Chinese Academy of Sciences, Beijing

Dec. 2018. - May. 2019

- Developed an **embedding generative adversarial networks** (GAN) to transfer specific face attributes from target face to source face, implemented in **Tensorflow**
- Designed an embedding pretrained network to extract face attribute features, enable our model to use interpolation between extracted source feature and target feature to generate a continuous changing process
- Trained a model that can complete multi-domain **Image-to-Image translation** task, generated better transfer images than **StarGan**

Research Assistant, Key Lab of High Confidence Software Technologies, PKU, Beijing

Oct. 2017 - Jan. 2018

- Analyzed medical data provided by Peking University Third Hospital to find the relationship between the right dosage and symptoms of a certain thyroid disease
- Designed a simple website where doctors can submit the data of over 400 patients and used **MySql** to store the data
- Consulted with doctors to find some potential features and trained machine learning model using **SVM** and **GBDT(XGBoost)**, achieved an accuracy rate of 93%

PROJECTS

Blog Site Project

Jul. – Aug. 2020

- Developed a full-stack blog website by using Bootstrap, jQuery, and **Django**
- Designed and developed frontend pages by using HTML, CSS, JavaScript and Bootstrap templates
- Designed the backend blog site using Django framework and the sqlite3 database

News Search Engine

Sep. – Dec. 2019

- Built a news search engine that can periodically collect news and a website where users can type keywords to search news and filter the results by date or language, implemented in **Java** and **React**
- Store the news data in **Amazon Elastic Search**, and deployed the API server to a Tomcat environment managed by **AWS Elastic Beanstalk**, the front end will send requests using REST API when users type some keywords in the website's search bar
- Added an **AWS Lambda function** to download news from common crawl news dataset and send the articles to **AWS SQS**. This function is triggered by a scheduled **CloudWatch** Event periodically
- Added another AWS Lambda function to parse the articles in the SQS, then upload them to AWS Elasticsearch, where API server can get the corresponded news articles

Distributed Software Development

Jul. - Aug. 2019

Supervised by Prof. Carl K. Chang and Robert Ward (Iowa State University)

- Led a team of 4 to develop a JAVA game in a **CI/CD** way
- Used **agile** method to manage the project, attend daily scrum and design methods to meet user story requirements
- Used **git** to integrate and **Jenkins** to watch over the status of the project