

WEI HUO

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EDUCATION

Johns Hopkins University
MSE Computer Science *GPA: 3.7*

Baltimore, MD
Jan 2018 - Dec 2019

University of Pittsburgh
Ph.d (a.b.d.) Chemistry *GPA: 3.6*

Pittsburgh, PA
Aug 2014 - Jan 2018

WORK EXPERIENCE

Bytedance
Software Engineer Intern

Beijing, China
Jun 2019 - Aug 2019

- Developed a Python module to validate the models serviced online by ensuring that they could correctly classify the selected positive and negative samples. Provided APIs for checking the status(cpu, gpu, mem, etc) of services running on TCE(Toutiao Cloud Engine) through the Thrift communication. All functions are both Flask API and linux command line accessible.
- Developed a static website named Bytedance.NLP in React.js and Gatsby.js for Bytedance NLP research group to manage, browse their academic articles, technical sharings, etc.
- Developed a dynamic website named NLP Development Studio and Service(NDSS) for Wiki and Demo of NLP services under research and development by Bytedance NLP research group.
- Deployed an Express server to support full-text search through the Elasticsearch service and to manage the frontend such as to restart the service, to record the analytics, etc.
- Daemonized all the services with PM2 and Systemd.
- Implemented a Node.js script to reconstruct the hierarchical orders of the folders and files locally by accessing the Docer APIs, which is the content source of all my services.

Bytedance
Software Engineer Intern

Beijing, China
Jun 2018 - Aug 2018

- Responsible for RTC(Real-time Text Classifier) backend development and maintenance using Python, Flask, Mysql, Elasticsearch, etc.
- Responsible for RTC frontend UI design and implementation with Bootstrap and JQuery.
- Integrated into RTC backend with Celery, an asynchronous task queue/job queue based on distributed message passing, to improve the efficiency and stability of the asynchronous task submission.
- Developed web APIs for Regex string management using Python and Flask to facilitate the dataset recall and tagging and other information retrieval needs. Regex strings are managed in Mysql. The web UI is implemented with Bootstrap and JQuery.

SKILLS

Programming Languages:	Java, Python, C/C++, HTML5, CSS3, JavaScript, ES6, Ocaml, Latex
Frameworks:	Node.js, Vue.js, React.js, Redux, Gatsby.js, Express, JQuery, Bootstrap, Flask, Pytorch, Maven, Spring, Hibernate
Technologies:	Docker, Nginx, Ajax, AWS EC2, NPM, Git, Mysql, Sqlite, Celery, Travis CI, Webpack, Jasmine, Karma, Lucene, Tomcat, Elasticsearch, Kibana, Systemd, PM2, Babel

PROJECT

Security Intelligence https://github.com/heaventourist/security_intelligence
Implemented a web service to help visualize the security intelligence data feed from the National Vulnerability Database. The frontend is implemented with Vue.js and iView, managed in Webpack. The backend APIs are written in Python and Flask. The data is managed in Sqlite3, a default database for Python. The service is unit-tested through Jasmine, Karma, Travis CI, etc.

Network Layers Stacking <https://github.com/heaventourist/captcha>
Implemented the transport layer and the security layer in Python and Asyncio for a virtual networking environment, proposed and discussed the RFC, and ran a gambling service on the top of the stack.

Shopping Helper https://github.com/heaventourist/Information_retrieval/tree/master/Project
Implemented a simple search engine to crawl a list of desired merchandizes from Amazon and Ebay ranked by their prices. The frontend is written in Vue.js and element-UI. The backend is written in Python and Flask. BeautifulSoup is employed to help analyze the web content and to fetch the desired information.