

Huimin Du

corey.hdu@gmail.com • +1 (614) 886-1304 • <http://web.cse.ohio-state.edu/~du.547>

Looking for software development engineer internship in 2017 summer

Education

Computer Science & Engineering, **The Ohio State University** M.S. Expected on 2018.05
B.Eng. at Software Engineering, **Southeast University, China** (GPA:3.6/4.0) 2012.09 – 2016.06

Experience

Veritas Technologies LLC Information Availability Team
Software Engineer Intern 2015.10 – 2016.03

- Implemented a cluster configuration management system which manages virtual disks on server and remote clients, integrating a half-hour's work into a line of command (**iSCSI, Linux, SunOS**)
- Developed new user interfaces for Product Assurance & Certification Tool (PACT) system to deploy, managed machine clusters and execute test cases (**JQuery-DataTable, Chart.js, Bootstrap**)
- Developed data request RESTful API, providing robust and efficient service by optimizing table structures and data access objects (**Mojolicious, PostgreSQL**)

Morgan Stanley Regulatory Report IT Team
IT Summer Analyst 2015.07 – 2015.09

- Built new data model based on meta data from regulatory report systems, making data well arranged and easier to access. Managed database migration from various of old databases (**SQL**)
 - Implemented Racetrack client GUI, presenting user Regular Report data and scripts in various of forms, including tables, figures and text editors (**MVVM, WPF, WebService**)
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Project

Academicmap.org 2016.11

- Composed a system where users can search and manage academic information within a property graph, making it incredibly efficient to find the relationships among people and research topics. The graphs can be managed and shared easily
- Developed the Web-based visualization system which organize information entries into a node graph. Designed several layout algorithms to keep the nodes well arranged. Developed server function to store and share the graphs (**Sigma.js, JQuery, PHP**)
- Enhanced the database by crawling more data and optimize data schema. Data quantity is up to 300,000 (**pySpider, Titan, ElasticSearch**)

Visualization System of Swarm Intelligence 2016.02 – 2016.04

- Designed a system on PC which visualizes the processing of swarm intelligence algorithms (particle swarm intelligence and ant colony optimization), which assists researchers analyze and improve the algorithms and generate experiment figures (**Swarm Intelligence Algorithms**)
- Developed the system including the GUI, the visualization frame and background algorithm modular on windows platform (**OpenGL, GLSL, FLTK**)

Nebula: A Hand-free Android Game 2014.04 – 2014.10

- Designed an Android game about Planetary evolution, combining with **brain wave chip** and **gyro-scope**, where the signals from player's head are captured and sent to device via bluetooth, to control the game without touching the screen
- Developed the game with Angel game engine and translated data from bluetooth to game controlling signals (**Android, Bluetooth, Angle Engine**)

Research on Swarm Intelligence Algorithms 2012.12 – 2014.5

- Conducted research on the application of swarm intelligence algorithms, applied particle swarm intelligence on optimal problems including wireless sensor networks deployments, with two papers published
 - Purposed deployment strategy for wireless sensor networks with movable nodes, which minimizes the energy consumption while maximizes the coverage rate for the whole network, providing a more stable and effective network solution (**PSO, WSN, Research**)
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Skills

C++, Python, Shell, Perl, Javascript (D3js, JQuery), OpenGL, SQL, Linux, CUDA
