

WENXUAN XIA

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Looking for a full-time Software Developing Engineer opportunity in 2017

🎓 EDUCATION

Purdue University, West Lafayette, IN 2015 Aug. – Present

Master candidate in Industrial Engineering. **Already full credits, expected Dec. 2016**, GPA 3.62/4.00

Direction: Simulation Algorithm Design and Programming

Zhejiang University Chu Kochen Honors College, Hangzhou, China 2011 Sept. – 2015 July

Bachelor of Science in **Computer Science**, GPA 3.49/4.00

📁 EXPERIENCE AND PROJECTS

Character Inventory, **Purdue University**, **West Lafayette, IN** May 2016 – Present

Full-stack Web Developer, Research Assistant - <http://www.characterinventory.org/>

- Implement prepared SQL queries, which increases maximum number of concurrent users by 50 times at least.
- Resolve 20+ critical bugs in the product to improve system performance and security.
- Construct code based on MVC structure, with agile methodology.
- Use Bootstrap to create multiple-device adapted UI, to make pages friendly to both PC and all-kind smartphone users.
- Frequently investigate users' experience, modify and improve data-display style by D3js.

Blog System, **Personal Project** Feb. 2016 – May 2016

Full-Stack Web Developer - <http://www.wenxuan-xia.com>

- Made requirements clear before implementation, and used Waterfall Model to organize the whole developing process.
- Designed RESTful server APIs, and used Ajax to load content into Django HTML templates non-blockingly.
- Used Python-Django to customize blog writing system, which makes easier for users to manage blogs.
- Display blog content in Mark Down style, allowing editors to create a beautiful and clear blog.
- Packed blog as an application in Django, which allows future developers extending new applications.
- Deployed the application on Amazon ec2, and used Route 53 redirect url to site .

DataVisualization Project, **Purdue University**, **West Lafayette, IN** Apr. 2015 – May 2015

Data Visualization Developer - <http://alone-all-life.github.io/>

- Used Javascript and D3js to visualize given data, which makes data expressive.
- Deployed website online and used Facebook Comment Plugin to collect users' feedback.

SENKEN Group Co., Ltd, China May 2015 – July 2015

Back-end Developer, Internship - Real-time information and geo-position sharing system for police hand-hold device

- Developed message-sending-fetching api using CodeIgnitor, making devices communicate with the server.
- Used 3NF method to design MySQL database structure to reduce redundancy and accelerate query speed.
- Designed data exchange protocol based on timestamp, which ensures synchrony of messages on server and devices.

🔍 RESEARCH AND COMPETITION

EagleLab, **Zhejiang University**, **Hangzhou, China** Sep. 2013 – Apr. 2014

Research Assistant - Efficient way to crawl most of templates from specific websites

- Designed a HTML-tag based algorithm to compute pages differences, which makes time cost $O(\text{number of tags})$.
- Developed Multi-thread web crawler, which is 10 times faster than single-thread crawler.
- Applied skipping strategy to crawl pages, which get 97% of templates by crawling only 10% pages.

2014 Mathematical Contest in Modeling, **Honorable Mention** Feb. 2014

Simulation Designer - Relation between highway speed limit and accident rate

- Designed zero-collision highway car moving model, which involved distance, speed and accelerate.
- Introduced normal noise into model, to consider drives might misjudge on real driving.
- Wrote simulation code in MATLAB, and draw speed limit-collision rate graph.

⚙️ SKILLS

- Programming language: Java(proficient), Python(proficient), SQL(proficient)
- Web developing: JavaScript, Node.js, HTML5, CSS3, MySQL
- Frameworks or libs used: Django, BeautifulSoup, Twitter Bootstrap, D3js, jQuery, Numpy, CodeIgniter
- Platform and version control: Mac OS X, Linux, Git