Shuai He

612-816-4258 • she1@nd.edu • https://github.com/xongkoro

Education

Master of Science, Computer Science   May. 2019

• University of Notre Dame

Bachelor of Science, Computer Science   May. 2016

• University of Minnesota Twin Cities

Work Experience

Research Assistant, *Department of Computer Science, University of Notre Dame*   Sept. 2016 - present

• Conducted HCI research and published multiple research papers on top-tier computer science conferences

Software Development Intern, *Siemens, Minnetonka, MN*   May. 2016 - Aug. 2016

• Designed and implemented a bug-tracking web application (JavaScript, PHP) that facilitates other developers' work and provide customers with practical APIs

• Developed and integrated multiple databases (PostgreSQL), refactored outdated codes existed in system

• Created new database schemes, optimized SQL queries and significantly reduced databases' response time

Web Developer*, Humphrey School of Public Affairs, University of Minnesota*   Nov. 2013 - Mar. 2015

• Front-end plan, development and maintenance of website in AngularJS and pure JavaScript

• Communicated with shareholders and developed various new features upon request

• Improved web page rank on Google results utilizing different Search Engine Optimization techniques

Technical skills

• Programming languages: Python, Java, Javascript/JQuery, PHP, SQL, C++

• Software tools: Git, Wireshark, MS Office

• Languages: English (Fluent), Chinese (Native), Korean (Basic)

• Operating Systems: Unix/Linux, Windows, Mac OS

Experiences & Projects

Nutrition Bytes   Jan. 2017 - Aug. 2017

• Designed and implemented an interactive visualization for nutrition data using D3.js.

Course Registration System   Sept. 2015 - Dec. 2015

• Design in object-oriented pattern, agile-development & implementation in Java

• Wrote requirements specification, design description, test documentation, postmortem report

• Unit testing, system testing, and code coverage measurement using Intellij's built-in frameworks and tools

Reddit Creeping   Jul. 2015 – Jan. 2016

• Large-scale data aggregation in Python for analysis purpose utilizing Reddit's API

• Wrote scripts to handle CSV, Excel files and system file management

FCAL to C++ Translator   Sept. 2014 - Dec. 2014

• Developed a translator (composing a scanner, a parser, and an abstract syntax tree), which translates FCAL
 (a domain specific language) programs into C++ programs.

• Utilized tools including modeling languages (UML), debuggers (GDB), and version control (Git)