# **Chengyue Gong**

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## **EDUCATION**

Washington University in St. Louis, St. Louis, MO

M.S. in Computer Science, GPA: 3.77/4.0

Aalborg University, Aalborg, Denmark

Guest Program, Internet Technologies and Computer Systems

Zhejiang University, Hangzhou, China

B.A. in English Language and Literature, GPA: 3.63/4.0

Expected Jan. 2020

Sept. 2016 - Jan. 2017

Sept. 2014 - Jul. 2018

# **RELEVANT COURSES**

Mobile Application Development, Computer Networks, Introduction to AI, Operating System Organization, Database Management System, System Security, Rapid Prototype Development and Creative Programming, Data Structures and Algorithms (Coursera), OOAD, Assembly Language Programming, Computer Organization

# **SKILLS**

C++, Java, C, Python, Swift, HTML/CSS, PHP, JavaScript, Assembly, MySQL, Matlab, Latex, ABAP

#### **EXPERIENCE**

# Developer Intern, SAP Innovative Business Solutions, Shanghai, China

Aug. 2017 – Jun. 2018

- Performed authorization tests for established applications and reported bugs for debugging
- Completed two training projects related to sales orders using ABAP (Advanced Business Application Programming) language and BOPF (Business Object Process Framework)
- Fixed VH (Visual Harmonization) issues and several other software bugs in the system

#### **PROJECTS**

## **Database Management System**

Jan. 2019 - Present

- Implemented HeapFiles which are the physical representation of the data in the database
- · Constructed a Catalog that keeps track of tables currently in the database and provides a way to access them
- Implemented relational operations and used **JSQLParser** to translate SQL queries into these relational operations
- Implemented B+ trees and integrated them with the database to create indices for columns

# Web Development

Jan. 2019 - Present

- · Made a file sharing website that supports uploading, viewing, and deleting files associated with various users
- Established a news website that enables users to share their own stories and view others' stories
- Built a calendar website that allows users to add and remove events dynamically

#### PacMan Game

Jan. 2019 – Present

Dec. 2018 - Present

- Implemented four search algorithms including **DFS**, **BFS**, **UCS**, and **A\***, and applied them to Pacman game
- Designed and optimized consistent heuristic functions for A\* search to gain better performance
- Implemented three adversarial search algorithms including **minimax** search, **alpha-beta** search, and **expectimax** search, and applied them to the Pacman game including ghosts

# iOS Application Development - MH Gateway, St. Louis, MO

- Created an iOS application for patients with mental disorder using **Swift**
- Used **Firebase** to authenticate users and store user information
- Provided doctors information and mental health insurance plans for patients, and enabled patients to track their mood and share their mood journal with doctors

## iOS Application Development - Instaurant

Nov. 2018 - Dec. 2018

- Designed and developed an iOS application for accessing restaurants information using Swift
- Utilized ARKit, Firebase, Yelp API, MapKit, WebKit, etc. during the development
- Displayed the restaurant information on AR (Augmented Reality) camera when the camera is aiming at a storefront