

GUANHUA CHEN

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EDUCATION

DUKE University

M.S. in Electrical & Computer Engineering
GPA: 3.57/4.0

August 2019 - Present

Huazhong University of Science and Technology

B.S. in Electrical & Computer Engineering
GPA: 3.75/4.0

September 2015 - June 2019

PROJECTS

Stash

Individual project: Java, JavaFX, Gradle

February 2020 - March 2020

Durham, NC

- Developed a 2D desktop puzzle board game, in which players could hide and find blocks.
- Implemented under SOLID principle & managed with Gradle.
- Introduced elegant GUI & audio by using JavaFX.
- Supported network gaming and competing with BOT.

Rider

Pair project: Django, PostgreSQL, Bootstrap, Nginx

January 2020 - February 2020

Durham, NC

- Developed a RESTful Uber-like web app and shipped in Docker.
- Implemented user friendly interface using Bootstrap and added CSRF token for protection.
- Stored user data in PostgreSQL and provided basic SQL injection protection.
- Used Nginx as HTTP load balancer.

Shell

Individual project: Linux, C++

November 2019 - December 2019

Durham, NC

- Implemented an UNIX shell in RAII style which could interpret basic command.
- Parsed the input string, then forked and executed.
- Provided access to environment variable and redirection for io stream.

RESEARCH

Lasers

Research asassistant: MATLAB

November 2017 - December 2018

Wuhan, China

- Designed an oscillator generating lasers and conducted numerical simulation with MATLAB.
- Helped build up the oscillator ideal for communication and the result was published on Optics Letter.

COURSES

Object-Oriented Programming, Data Structure and Algorithm, Operating System, Computer Network, Database, Robust Server

STRENGTHS

Languages

C++, C, Python, Java, JavaScript, CSS, HTML, SQL

Framework

Django, Bootstrap