

# HUI LI

Email: [huiyiyea@gmail.com](mailto:huiyiyea@gmail.com) Phone: (919)491-8964

LinkedIn: <https://www.linkedin.com/in/hui-li-ab6268146/>

## EDUCATION

---

- Duke University**, Durham, US 08/2017- 05/2019
- Master of Engineering in Computer Engineering GPA: 3.73
  - Core course: Performance Optimization & Parallel, Systems Programing, Software Engineering, Engineering Robust Server Software, Advanced Algorithm
- Baylor University**, Waco, US 08/2014 - 12/2016
- Bachelor of Engineering in Electrical and Computer Engineering GPA: 3.61
  - Dean's Academic Honor List

## SKILLS

---

**Languages:** C/C++, Python, Java, HTML5

**Technologies:** Unix, High Concurrency, Django, PostgreSQL, MongoDB, git, Docker, CUDA, Android Studio

## WORK EXPERIENCES

---

- Microfun**, Beijing, China 06/2018 - 09/2018
- C++ backend developer Intern
- Designed, developed and tested a high-performance HTTP server to replace former framework h2o for the further development and higher performance
  - optimized thread utilization based on Atomic, Kqueue and Asynchronized I/O which is the different with the normal framework using Non-block I/O
  - Increased the performance largely using thread pool and memory pool as the strategy
  - Increased the robustness to failures with RAII and Exceptions
  - Deployed the server into a container with Docker for the ease of transportation and isolation
- Baylor Research and Innovation Collaborative**, Waco, US 07/2016 - 09/2016
- Undergraduate Researcher
- Modeled four-dots Quantum-dot Cellular Automata molecules in MATLAB for simulation
  - Improved the program in CUDA and ran on GPU for 5x speed up

## SELECTED PROJECTS

---

- Mini Amazon**, Duke University 05/2018 – 06/2018
- Built the Mini Amazon website frontend based on Django and Python
  - Implemented the Backend in C++ for high concurrency
  - realized the communication between the front and back end using Google Protocol Buffer for the ease of communication
  - Replaced PostgreSQL with MongoDB for the flexibility of editing the attributes for the product
- Rootkit**, Duke University 05/2018 – 06/2018
- Implemented a Rootkit in C++ which is designed to hide the intrusion to a system as well as to maintain privileged access
  - The Rootkit can hide the malicious program, the related directory under /proc, the modifications made to the system and kernel module installed
- ProjectU Android-APP**, Duke University 03/2018 – 05/2018
- Built a project management Android app for software developers with agile development as default template in Java and Android Studio
  - Implemented the contact list and real-time group chat feature using Google Firebase as backend