Permanent Address:

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Yonathan Fisseha

yonathanfisseha.com

School Address:

741-2 Lambeth, UVA Charlottesville, VA 22904

EDUCATION

University of Virginia, Charlottesville, Virginia

Bachelor of Science in Computer Science, GPA 3.7

Relevant coursework: Algorithms, Databases, Data Structures, Operating Systems, Program

Analysis, Software Testing, Compilers, Internet Scale Applications, AI

Community College of Aurora, Aurora, Colorado

Associates in Science

Aug. 2013 - May 2016

Expected May 2020

WORK EXPERIENCE

Algorithms, OS, Web PL, Adv. Software Development, University of Virginia

Aug. 2018 - Present

Teaching Assistant

- Holding office hours to help students with homework and exam preparation
- Designing rubrics for homeworks and exams
- Grading homework and exams

Intune, Microsoft Corp.

May. 2018 - Aug. 2018

Software Engineer Intern

- Designed and implemented Network-Fencing and Geo-Fencing testing tools for the Intune Android client using Hyper-V and Android Mock Locations
- Integrated the testing tools with the existing CI infrastructure
- Created architectural designs for these tools
- Produced specifications, one-pagers, and reports to communicate with PMs

ICARE, University of Colorado School of Medicine

Aug. 2015 - Sep. 2017

Software Developer

- Worked with researchers and professors to gather software requirements
- Used various web frameworks, including Django and ASP.NET for implementation
- Hosted and maintained web applications on Azure and AWS

RESEARCH and PROJECTS

Compression-Aware Algorithms and MPC, University of Virginia

Aug. 2017 - Present

Undergraduate Researcher

- Re-designed classical string and graph algorithms such that they can process data compressed with certain compression schemes without decompressing the data
- Implemented a graph compression algorithm and a generalized graph generator
- Exploring the application of compression-aware algorithms in multi-party computation

NetSys Group, UC Berkeley

May 2019 - Aug 2019

Undergraduate Researcher

- Surveyed the existing literature on streaming algorithms, cryptographic schemes, and data summarization
- Designed a technique for securely summarizing streaming data using sketching data structures and symmetric partially homomorphic encryption schemes
- Implemented a portion of the system on top of Summary Store

NoSQL Databases and Distributed Computing, University of Virginia

Aug. 2016 - May 2017

Undergraduate Researcher

- Experimentally analyzed the performance of NoSQL database systems on a distributed computing framework
- Proposed a Hybrid Transactional/Analytical Processing system based on experimental results to bridge the gap between data storage and analytics for Big Data
- Co-created a poster for the conference CAPWIC 2017 and won 1st place

SKILLS

Programming languages: Java, C/C++, Python, SQL, X86 Assembly

General: Unit and Integration testing, Technical writing and documentation, Linux and related tools, VC/Git