**Shangxing Sun**

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**Education Background**

* **Duke University May 2018**
* Master of Science in Electrical and Computer Engineering GPA: 3.77/4.00
* **Chongqing University June 2016**
* Bachelor of Electrical Engineering Ranking: 14/438 GPA:3.70/4.00
* **The University of Wisconsin-Milwaukee Feb 2016 - May 2016**
* Exchange Program for the Graduation Project under the grant of China Scholarship Council

**Skills**

* **C, C++, Swift, Java, python, VHDL, SML**
* **Linux, Matlab, git, vim, postgres, Django, Amazon S3, FUSE, Android Studio, Firebase,** [**Quartus IIM**](http://people.duke.edu/~tkb13/courses/ece550-2016fa/resources/intro_to_quartus2.pdf)

**Internships and Employment Experience**

* **TA for Course: Engineering Robust Server Software Jan 2018 – May 2018**
* **TA for Course: Fundamentals of Computer Systems and Engineering Sept 2017 – Dec 2017**
* **Graduate Program Administration Website for Duke University May 2017 – July 2017**

*https://gitlab.oit.duke.edu/ss811/ECE\_GRAD\_website.git*

* Developed a management website in which course selection plans can be conveniently uploaded by student and managed by faculty
* Completed design of most User Interfaces and functions of the front end by using JavaScript and HTML and backend functions by using Django

**Professional Research and Projects**

* **Tiger Compiler Implemented in SML, course project, Durham NC Jan 2018 – May 2018**

*Gitlab link: https://gitlab.oit.duke.edu/ss811/TigerCompilerInSML.git*

* Developed a Tiger compiler which is implemented in SML following Andrew W. Appel's "Modern Compiler Implementation in ML"
* The compiler can successfully parse Tiger programs and translate them to MIPS assembly code after the process of parsing, semantic analysis, IR, IS and register allocation
* **Cloud Cache Tier Server, course project, Durham NC Sept 2017 – Dec 2017**

*gitlab link: https://gitlab.oit.duke.edu/ss811/EnterpriseStorageArchitectureProject.git*

* Developed a cloud cache server to automatically cache files from cloud with SSD using FUSE (File system in user space) (C++)
* **Athena App: An Iphone Application for Sport Grouping, course project, Durham NC Sept 2017 – Dec 2017**

*Gitlab link: https://gitlab.oit.duke.edu/ECE651\_S17\_PROJECTS/Plus3s*

* Developed an application which allows users to match with opponents based on skill level, location and time (Swift)
* Designed backend functions to communicate between firebase and the application
* **DukeGather: An Android App for Ride Sharing, course project, Durham NC January 2017 – May 2017**
* Developed a Java ride sharing app allowing users to post ride sharing information, form groups and send messages and pictures in the group (Java)
* Implemented user interface, message sending function, and database functions using firebase
* **Mini UPS Website and Backend Server, course project, Durham NC April 2017 – May 2017**
* Developed a mini UPS backend server which realizes asynchronous communication with “Amazon” partner and world simulation to simulate delivery system (C++)
* Developed a matching website for users to check delivery status (Python/Django/Javascript)