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**

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**
  - 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)