

# Robert A. Rash

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8189 Midtown Blvd,  
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## skills

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Strong interest in **computer security**. Excellent **organization** and **project management** skills. Competent **public speaker** and skillful **technical writer**. Quick learner with a command of **Java**, **C++**, and **Python**, as well as advanced knowledge of **UNIX / Linux**. Experienced in relational data modeling and the fundamentals of **information security**.

## education

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Southern Methodist University , Dallas, TX

- Bobby B. Lyle School of Engineering, '18
- BS, Computer Science, security track

### GPA

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Overall	Engineering

## work experience

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**Research Assistant** — SMU Simmons School of Education & Human Development (May 2016 – present)

ELVA (English Learner Vocabulary Acquisition) was a National Science Foundation (NSF) grant project to develop new computer-based English learning tools and evaluate them. Deployed laptops with our software to 120 elementary students. Turned project investigators' curriculum into decision trees and XML content for the ELVA app. Helped simplify laptop deployment by designing a Windows master image, managed with Group Policy, and imaged all the devices in one step over LAN. Additionally, I performed Quality Assurance work on new versions of the application before it was deployed to students.

Contact: Dr. Doris Baker (214.768.3227)

**Student Worker** — SMU Dedman School of Law Underwood Law Library (August 2017 – January 2018)

Provided technical and AV support for classrooms. Offered clerical support for members of the library leadership. Maintained supply stock throughout the law library's printing system.

Contact: James Pan (214.768.1820)

**Student Worker** — SMU Lyle School of Engineering, Information Technology (December 2014 – December 2015)

Routinely set up computers in various engineering school offices and labs. Verified documentation of patch panel/switch connections. Installed maintenance kits, toner cartridges, and ink cartridges as needed. Maintained supply stock throughout the engineering school printing system.

Contact: Merlin Wilkerson (214.797.9874)

## projects

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### Database Concepts (CSE 3330)

Semester group project  
Fall 2016

Worked with a split team of GUI and DB students to build ParkIt, an iOS app to help find parking on campus. Developed a normalized relational data model. REST API built on Flask (Python), backed by a MySQL database management system. Deployed to Ubuntu cloud compute instances. ([github.com/andy-rash/ParkIt](https://github.com/andy-rash/ParkIt))

### Project ELVA Log Parser

Work project  
Spring 2017

Project ELVA had difficulty collecting and analyzing the log files from thousands of hours of student evaluation through our teaching tool. Developed a Python toolkit to parse ~30 gigabytes of text logs into rich data for the project's data scientists. Published the formatted data to a PostgreSQL database in our private cloud for easy access by the team.

### Data Structures (CSE 2341)

Individual final project  
Spring 2016

Implemented an XML indexer and search engine in C++. Indexed a ~1 gigabyte corpus of WikiBooks entries in less than one minute. A command-line search function allowed basic boolean queries, and returned results in a time frame on the order of milliseconds.