

# SAFAL LAMSAL

SOFTWARE ENGINEERING MAJOR - RESEARCH ASSISTANT

lasafalus@gmail.com

817-733-1199

[linkedin.com/in/safal-lamsal](https://www.linkedin.com/in/safal-lamsal)

[github.com/muedie](https://github.com/muedie)

## ABOUT ME

---

<b>Technical Skills</b>	C/C++, Unix/Linux, Python, SQL/NoSQL, Java, Excel
<b>Web &amp; Design</b>	HTML/CSS/JavaScript, React/Redux, Flask, NodeJS/Express, Bootstrap/jQuery
<b>Interests</b>	Machine Learning, Cryptography, Distributed System, Security

## WORK EXPERIENCE

---

### Research Assistant

Department of Computer Science and Engineering, UTA

Arlington, TX (Jan 2018–Present)

- Designed and Implemented Cache Replacement Algorithm in C/C++
- Currently developing an Algorithm to improve upon the current replacement algorithms

## PROJECTS & COMPETITIONS

---

### HackRice 8 at Rice University

(Sep 2018)

- Won the Chevron company sponsored challenge
- Built a [web app](#) in group of 3 to optimize the work order process in Chevron complex process facilities
- Designed the database using an ORM and created REST API endpoints using Flask web server in Python

### Flack

(Aug 2018)

- A slack-like chat WebApp built with Python and JavaScript
- Used Websockets for real-time communication on client & server side

### Next-Read

(Aug 2018)

- A book review website built with Python and PostgreSQL database on the server
- Gained experience in server side rendered web pages, authentication, and JSON APIs

### UberCasino

(Jan 2018–May 2018)

- Designed and developed a distributed blackjack game using C++ and FLTK for user interface
- Used OpenSplice, a Pub/Sub Middleware for peer-to-peer communication, while maintaining interoperability between different systems
- Used practical approach to software development through analysis, design & implementation, testing, and maintenance

### Several Operating Systems Projects

(Jan 2018–May 2018)

- [msh-shell](#) - Simple bash-like shell implementaion in C
- [fat32-utility](#) - Utiliy for the FAT32 file system image that can read and display useful information
- [file-system](#) - In-memory Indexed Allocated file system that can perform read, write and display useful information

### Mav's Ice Cream Emporium

(Aug 2017–Dec 2017)

- Designed a GUI management system using C++ and gtkmm
- Lead a group of 4 and managed the project using Scrum framework
- Made use of Version Control, Debugging Tools, and UML Diagrams

## EDUCATION

---

### The University of Texas at Arlington

Arlington, TX (2016–Present)

- B.S. in Software Engineering
- Expected Graduation: May 2020

### freeCodeCamp

(2018–Present)

- [Front End Web Developement Certification](#)
- [JavaScript Algorithms and Data Structures Certification](#)