

Jacob Elnaggar

(504) 982-8686
elnaggarj96@gmail.com
2415 S. University Parks Dr., Unit 5303, Waco, TX 76706

Bioinformatics graduate from Baylor University, and medical school student at LSU School of Medicine, seeking research position for the summer of 2018

Professional Experience

BAYLOR UNIVERSITY, WACO, TX

Bioinformatics Capstone Project, August 2017 – December 2017

- Worked with Erich Baker, PhD, on his bioinformatics website, Geneweaver.org
- Created an algorithm for users to compare multiple gene interaction networks, allowing biologists to discover underlying patterns in a specific disease

MD ANDERSON CANCER CENTER, HOUSTON, TX

Independent Researcher in Bioinformatics/Computational Biology Department, June 2017 – August 2017

- Internship at the number one cancer research center in the world
- Implemented a computational model that analyzes cancer biopsies and nominates treatment therapies
- Used my combined knowledge of computer science and cancer biology
- Advanced network modeling and machine learning

BAYLOR SCOTT & WHITE MEDICAL CENTER, WACO, TX

Consultant, January 2017 – May 2017

- Worked in a team to create a database for the hospital
- Designed to store procedure information for a patient before, during, and after each operation
- User-friendly website as the front end
- Created this using MySQL, PHP, Java Script, and HTML

LSU HSC BIOINFORMATICS, NEW ORLEANS, LA

Bioinformatician and Data Analyst, June 2016 – August 2016

- Research internship at LSU Health Science Center
- Worked in the Bioinformatics and Genomics program
- Analyzed large sets of patient data for genomic patterns in breast cancer
- Curated a manuscript from the findings that is being published

SOFTWARE ENGINEERING, BAYLOR UNIVERSITY, WACO, TX

Created an RFID system for an ENT clinic, August 2016 – December 2016

- Worked in a team to create a system that utilizes RFID readers in a Head and Neck Surgery clinic
- Part of a Scrum Team
- Created this system using Java and multithreading

LSU HSC, NEW ORLEANS, LA

Researcher in Physiology Department, June 2015 – August 2015

- Research internship at LSU Health Science Center in the Physiology department
- Mapped protein expression in Rhesus Macaque prefrontal cortex to model the effect of combined stimuli using network modeling

Education

BAYLOR UNIVERSITY, WACO, TX

2014-2018

BS in Bioinformatics

3.9 GPA (Dean's List)

Relevant course work

- Data Structures
- Algorithms
- Database Design & Application
- Organic Chemistry
- Datamining
- Software Engineering
- Biochemistry
- Machine Learning

Skills and Abilities

Technology

- Python
- C++
- Java
- R
- SQL
- Java Script
- HTML
- Assembly
- CSS
- C
- PHP
- Bash
- Visual Studio, Vim, Eclipse, RStudio, Git, IntelliJ, PyCharm
- Windows OS, Mac OS, Linux OS (Ubuntu & Red Hat)

Extracurricular

Organizations

- **Association of Bioinformatics and Biotechnology**
Vice President. ABB is an academic club designed for bioinformatics students and students who are interested in the fields of bioinformatics and biotechnology.
- **Baylor Medical Ethics Discussion Society**
Service Officer. I lead volunteer events in the Waco area, including Mission Waco, and I help our members get involved with service.
- **Computer Science/Bioinformatics tutor/mentor**
I tutor and mentor freshman Bioinformatics students during their first year at Baylor University.