

Ryan Neissess

Education

B. S. Computer Science - Washington State University - Pullman

Grad. May 2020

Courses: **Advanced Data Structures, Algorithm Design/Analysis, Systems and Operating Systems, Machine Learning, Security, Networks, Parallel, Capstone**

GPA: **3.82**

B. S. Animal Sciences - Washington State University - Pullman

Grad. May 2016

Minors: Chemistry, Japanese

Magna Cum Laude

Experience

Software Engineering Intern at Premera Blue Cross
Mountlake Terrace, WA (Jun 2019 to Aug 2019)

- *Provided quality-of-life updates/fixes for a Microsoft Dynamics/CRM desktop app to **improve service rep response time and customer satisfaction***
- *Worked with the team in **Agile** and **hotfix** dev/prod environments, plus managed **SQL** queries and monitoring across multiple **databases***

TA for CS 1, CS 2 Courses in C, C++

WSU - Pullman, WA (Jan 2016 to Dec 2018)

- *Expanded fundamentals by teaching **data structures** and **object-oriented design**, regularly achieving **top exam & evaluation scores** across 10-20+ sections*
- *Emphasized program development and design through **critical thinking**, debugging, **testing**, and **collaboration***

Projects and Extracurriculars

Linux Compatible EXT2 File System in C

- *Supports core file system commands (**mkdir**, **rmdir**, etc) and **file I/O** operations (**cat**, **cp**, etc), and is **mountable** by Linux systems*
- *Utilizes **pointer** and **bit manipulation**, and **inode** management, with exact EXT2 file types and includes **double indirect block** support*

Linear Regression Perceptron Classifier in Python

- *From-scratch novel improvement on **multilayer perceptron** with **cross-fold validation**, tested against **scikit-learn** library implementations*
- *Includes **hyperparameter** testing, such as **learning rate** and **tolerance**, and successfully out-performs classic methods on more complex data sets*

Spreadsheet GUI Application in C#

- *WinForms desktop app developed and **tested** in five working stages, using **design patterns** including **factory method** and **observer***
- *Implements core math operations with **expression trees** and **Dijkstra's** shunting-yard, **event handling** to update cells, and load/save with **XML***

Crimson Code Hackathons

- *2019: Worked in a team of 3 designing the user interface and flow of user interaction using **Kotlin** and **Android Studio** for an Android **mobile app***
- *2017: Worked in a team of 4 to build a **GUI** desktop application in **C++** using **SFML** for a campus-wide accessible and **shortest paths** map*

Skills

Languages **C, C++** (experienced), **Python** (proficient), **C#** (proficient), **SQL** (familiar)

Technical Version Control (**Git**), Linux, Adobe Illustrator, Project Mgmt Professional Training

Honors and Awards

Google Kickstart Mini-Competition Winner (Sept 2018)

Honors Elec Engr & Comp Sci **Outstanding TA**, Multicultural Student Services Recognition Speaker

Scholarships Richard Rhiger; Ralph & Gladys Lowry; James Ewing; WSU Dean's, Cougar Academic Award

"I'm a self-taught cook and baker, frequently developing recipes, striving to write a cookbook."