TAYLOR H. WEST

**ACADEMIC EXPERIENCE**

**CS 142 – Intro to Computer Programming**

* *Learned basic programming data structures and concepts*
* *Gained familiarity with C++ and experience pair programming as*

**MATH 215 – Computational Linear Algebra**

* *Gained experience working with Python, specifically working with the numPy and Matplotlib libraries.*
* *Worked with multidimensional data to create solutions to large scale problems via mathematical modelling.*
* *Implemented matrix and vectors solutions to analyze scientific and technological problems.*

**CS 235 - Data Structures**

* *Manually Implemented fundamental data structure and algorithms, including linked lists, binary search trees, hash tables, insertion sort, and quicksort algorithm.*

**CS 236 – Discrete Structures**

* *Designed and created a relational database using various concepts of discrete mathematics*
* *Used topological sorting to optimize datalog query processing, finite state machines for lexical analysis, grammars for parsing, and propositional and predicate calculus for logic programming*

**CS 240 – Advanced Programming Concepts**

* *Learned Java by designing and implemented an android mobile application utilizing principles of object-oriented design*
* *Created web APIs to interact with a SQLite relational database*

**CS 260 – Web Programming**

* *Gained experience in Javascript programming using Vue to build HTML/CSS websites using a Single Page Application (SPA) mode and web design principles*
* *Used Node.js and Express in conjunction with a MongoDB database to build the back end of a web application that provides a REST API*
* *Setup a web and database server on a remote virtual machine running Linux and used command line tools to manage the server*

**CONTACT**



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**TECHNICAL SKILLS**

C++

R & R Shiny

Java (Gson, JUnit test)

Android mobile development

Javascript (Node.js, Express, Vue)

Python (numPy, Matplotlib)

Object Oriented Design

MongoDB and SQLite

Word and Excel VBA

Brightspot CMS

**EDUCATION**

**BRIGHAM YOUNG UNIVERSTIY**

*Bioinformatics Major*

*Provo, UT*

2019 – present

TAYLOR H. WEST

**WORK EXPERIENCE**

**Research Assistant**

***Bailey Bioinformatics Lab*, BYU I January 2022 – Present**

*Collaborated with a small team to create custom pipelines and publicly available tools at academic standards for the analysis of multi-omic oncological data*

* Collaborated with the Huntsman Cancer Institute at University of Utah to develop predictive and data-driven tools for analyzing genomic and proteomic data of cancer organoids
* Worked with a small team to develop a R-Shiny web app that utilizes machine learning and matrix transformations to generate a Polygenic Risk Score for a broad range of oncological genomic data
* Wrote and submitted data access requests to various cancer research institutions worldwide, with the eventual goal of building an industry-leading database in the field of oncological organoids

**MEDICAL TECHNICIAN**

***Happy Valley Clinic*, Orem, UT I May 2021 – Present**

*Demonstrated ability to work closely with a diverse demographic in a clinical setting and coordinate patient care.*

* Demonstrated excellent interpersonal skills in a clinical setting with a very diverse patient demographic
* Served as an in-house technology consultant
* Coordinated patient care and managed treatment plans
* Ensured quality of care for each patient and reported to the Clinical Director concerning patient status
* Took vitals for new patients, assisted a physician during various procedures, and administered a wide variety of treatments

**SOFT SKILLS**

Clear Communication

Detail Oriented

Team Player

Self-Starter

**AWARDS**

**PHI ETA SIGMA**

*National Honor Society*

March 2021

**EAGLE SCOUT**

*Boy Scouts of America*

August 2017

**REFERENCES**

**Matthew H. Bailey, PhD**

Assistant Professor

BYU Bioinformatics

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**Brock Roberts**

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**Charlene Clark**

Office Manager

BYU School of Social Work

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**VOLUNTEER EXPERIENCE**

**Care Coordinator**

***Community Health Connect* I September 2021 - Present**

*Coordinated the treatment plans and clerical aspects of a non-profit organization serving low-income and disadvantaged populations*

* Trained on HIPPA compliance and security measures associated with patient health data
* Coordinated with hospitals and doctors to ensure that the treatment experience was smooth and painless for patients
* Onboarded and assisted patients primarily, in Spanish