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<https://zmshah.github.io/Portfolio/>

Objective

Seeking an internship as a software developer where I may utilize my current skills in object-oriented programming, databases, and web application development while also growing as an Information technology professional.

Education

Master of Science, Minnesota State University Mankato, MN
Major: Information Technology (MS),
Database Technology Graduate Certificate
Expected Graduation Date: December 2022
Current GPA: 3.94

Bachelor of Arts, Augustana University, Sioux Falls, SD
Major(s): Computer Science,
Computer Information Systems
Graduation Date: May 2020
Graduation GPA: 3.58

Skills

- *Programming skills:* Java, C# with ASP.NET and Blazor Framework, PHP, HTML5, CSS3, JavaScript (jQuery library and React.js framework), SQL (Microsoft SQL and Oracle PL/SQL), MySQL, Unity, R
- *Office Skills:* Microsoft Excel, Microsoft PowerPoint, Microsoft Word, Microsoft Access
- *Other skills:* Customer Service, Photoshop, Sketching and painting

Relevant Coursework

Undergraduate Coursework: Computer Science 1, 2 and 3(Java), Advanced Data Structures (Object Oriented Programming), Software Engineering (Software Development Life Cycle, Waterfall and Agile development methodologies), Computer Organization, Operating Systems, Data Analytics(R statistical computing), Theory of Computation, Website Development and Design (HTML5 and CSS3), Management Information Systems 1 and 2, Principles of Management, Principles of Marketing, Project Management

Graduate Coursework: Database Management Systems, Web Application Design and Development, Advanced Object-Oriented Programming with Design Patterns, Software Quality Assurance and Testing, Information Risk Management, Big Data Systems

Projects:

- *Retirement Calculator.* Created a retirement calculator web application in HTML, CSS and JavaScript using the React.js framework. The application takes in user input through a form and performs computations to find the estimated retirement savings at the user's desired retirement age. The results are also displayed in both a table and a graph displaying the user's total retirement savings each year from their starting age as well as displaying retirement savings post-retirement by accounting for retirement expenses. [GITHUB LINK](#)
- *Salary web application.* Created a web application using ASP.NET Blazor framework which allows a user to interact with a fictional salary dataset. The data is displayed on a grid table with the ability to sort, search and filter the data. The table also displays calculated values of sum, mean, median, minimum, and maximum updated dynamically. The data is stored in a Microsoft SQL Server database utilizing a REST API for interaction between the database and the client. Primary programming languages used include C#, HTML and Razor Markup. [GITHUB LINK](#)
- *Vehicle Rental Database System.* Worked in a team of 5 to create and manage a database for a fictional vehicle rental company using MSSQL Server. The database was also ported to a MySQL database. My main role included creating a web application using PHP to interact with the database in MySQL and displaying the data, writing queries for the main database in Microsoft SQL Server, designing the Entity Relationship diagram, and managing the project. [GITHUB LINK](#)
- *Expenses Tracker* web application using the React.js Framework for the front-end design and functionality. Functions include displaying transactions as an income or expense, adding and removing transactions, and displaying the current balance as a difference of the income and expenses. [GITHUB LINK](#)

- *2D Platformer*. Worked in a team of 3 to create a 2D platformer game in Unity using C#. The game was used as a sandbox for utilizing various design patterns. My main role was to apply the following programming design patterns – Strategy, Builder, Proxy, Observer, Prototype and Singleton. The patterns were utilized in designing various movement and behavior of enemy characters in-game. [GITHUB LINK](#)
- *Text Mining of FAANG Company Employee Review Data*. Worked in a team of 3 to perform text mining and sentiment analysis on a dataset containing employee reviews from FAANG companies obtained from Glassdoor. My primary responsibilities included storing and managing the data in a Microsoft SQL Server database and performing preliminary analysis and visualization using Power BI. [GITHUB LINK](#)
- *Data Visualization and Analysis of Video Game Sales* between the years 1980-2016 using R scripting language and RStudio. Project folder includes two research papers. The first is a visualization of the data with charts and key statistics such as Global sales by platform/genre as well as detailed analysis on sales patterns. The second research paper studies the effect of ESRB ratings on video game sales in North America by performing One-way ANOVA in R. [GITHUB LINK](#)
- *Scheduling system* Worked in a group of four to design and test a scheduling system for Augustana University Campus health services using Google Calendar for appointment management and Java for parsing calendar files to be read into an excel document as part of a Software Engineering group project. My primary responsibilities involved designing the system architecture and testing the scheduling system on Google Calendar. [GITHUB LINK](#)
- *Blackjack* Single player blackjack program in Java with a graphical user interface. [GITHUB LINK](#)
- *Calculator* program in Java with a graphical user interface that performs arithmetic operations on 2 values. [GITHUB LINK](#)
- *Tic-tac-toe* application in Java with a graphical user interface. [GITHUB LINK](#)

[PORTFOLIO LINK](#): Click here to view my portfolio hosted through GitHub

Work Experience

Graduate Assistant: CSET Liaison

Kearney International Center at Minnesota State University Mankato, MN

August 2021-present

- Assisting the Kearney International Center and the College of Science, Engineering, & Technology (CSET) with recruitment and retention efforts of international students.
- Developing new retention strategies, events, and programs through collaboration with other college departments.
- Liaise with CSET faculty and programs to identify capacity for enriching student experiences academically.
- Advising international students in CSET programs.

Office assistant

Center for Excellence in Teaching and Learning (CETL) at Minnesota State University Mankato, MN

February 2021-July 2021

- Providing support to the center and office coordinator with various tasks and projects
- Assisting with research, and coding interviews and focus groups.
- Greeting faculty and students
- Organizing files for the center and tracking inventory
- Performing day-to-day administrative tasks

Resident advisor (Viking advisor)

Augustana University Sioux Falls, SD

August 2018-May 2020

- Developing and fostering a community by managing a residence floor of students.
- Encouraging diversity and inclusion through floor events and activities.
- Working as a team with other Floor advisors and individually to enforce university policies
- Assisting campus life with administrative tasks including opening and closing procedures of residence communities, writing regular reports, and bi-semester check-ins for individual students in residence halls.