Ashwin Konda

(510) 480-7456 | axk6202@psu.edu | linkedin.com/in/ashwinkonda | github.com/ashwinkonda | ashwinkonda.github.io

EDUCATION

The Pennsylvania State University, Erie, PA **Expected:** May 2026
B.S. in Computer Science
Relevant Courses: OOP with Web-Based Applications (CMPSC 221), Intermediate Programming (CMPSC 122), Introduction to Programming Techniques (CMPSC 121), Database Management Systems (MIS 336), Calculus II (MATH 141), Matrices (MATH 220)

SOFTWARE SKILLS

Languages: Java, C++, Python, SQL, HTML, CSS
Tools/IDE's: Visual Studio Code, IntelliJ IDEA, CLion, Microsoft SQL Server, Swing

ACADEMIC PROJECTS

Chess
Java • Swing
- Developed an interactive GUI-based Chess game following the Model-View-Controller (MVC) design pattern.
- Implemented a user-friendly UI using JComponents, where I designed and structured the chess interface with a 2D array of JButtons
- Employed higher-order functions, such as lambda expressions, to handle complex move validation, enhancing the accuracy and efficiency of gameplay mechanics.
- Leveraged Enums to encapsulate constants, promoting code readability and maintainability

Search and Sort App
Java • Swing
- Created a GUI application that employs searching and sorting to handle large datasets, utilizing the MVC design pattern.
- Implemented various sorting algorithms such as insertion sort, bubble sort, and merge sort, allowing users to sort integer data interactively.
- Incorporated searching algorithms like linear search and binary search, providing users with options to search for specific integer values within the data set.

Coin-Flip Game
C++
- Developed a coin-flip game that utilizes probability and rewards players with points for achieving more than three consecutive tails.
- Implemented fail-safe measures to end the game immediately if the coin lands on heads.
- Displayed a 100-Flip example to the user to ensure there is no bias in the game.
- Implemented time-based functions to generate random flips every time, enhancing the unpredictability and variability of the program's output.

WPM Calculator
Python
- Developed a Words Per Minute (WPM) calculator, guiding users to type a provided phrase and calculating their typing speed.
- Utilized a continuous loop to prompt users for input until they choose to conclude, enhancing their typing proficiency through repetitive practice sessions.

CLUBS/ACTIVITIES

Penn State Behrend Computer Science Club, Member, Penn State Behrend
- Developed a comprehensive understanding of version control systems such as Git, GitHub, and GitLab, demonstrating proficiency in their implementation to effectively manage and track changes across multiple projects.
- Collaborated and worked on C++ projects with other computer science enthusiasts.
- Discussed and utilized object-oriented programming.

DECA Club, Participant, Mission San Jose High School
- Formulated a dynamic marketing strategy to boost the launch and sales of the Tesla Cybertruck, incorporating innovative tactics to maximize exposure and generate interest among potential buyers.