

Jay Thomas Blankenship

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OBJECTIVE

An eager, well rounded software developer who's focuses are in full stack development, graphical programing, database integrated applications, model free learning, networked applications and an extensive understanding of all data structures. I strive to build the most creative as well as efficient software solutions, by making precise properly annotated functions and software system structures. Seeking a challenging and rewarding position within the software industry, I am eager to call myself a Software Developer who is part of a development team.

EDUCATION

University of Illinois at Chicago

December 2021

Bachelor of Science in Computer Science

Major: Computer Science

TECHNICAL KNOWLEDGE

Languages - C++, C, C#, SQL, Java, JavaScript, Kotlin, JSP, PHP, WebGL/OpenGL, HTML, Python, XML, CSS, F#, Perl

Applications - Visual Studio 2015/2017/2019/2022, Unreal Engine, Visual Studio Code, IntelliJ, MySQL Workbench, Postman, JIRA, Android Studio, NetBeans, Eclipse, Microsoft Office, MATLAB, Arduino IDE, Postman, Wireshark, Bash, putty, winscp

Proficiencies - Android Development, Client Server Applications, Desktop Applications, GitHub, Perforce, Source Tree, UI Development, Spring Framework, Java Web Development, Networking, Multithreaded Applications, Object Oriented Programming, Web Applications

WORK EXPERIENCE

Centuria Government Contractor for National Oceanic and Atmospheric Administration, National Data Buoy Center, U.S. Department of Commerce, U.S. Department of Defense, U.S. National Weather Service and Defense Advanced Research Projects Agency at John C Stennis Space Center , Mission Control - Hancock County, Mississippi- Scientific Applications Programmer/Database Administrator - security clearance

2022 - Present

- Maintain and update systems, including network features, and replace depreciated libraries with new ones or build new class objects to be used in production.
- Build new classes/objects to replace existing code, mostly in a live deployed environment with little room for error, and create test environments.
- Ensure security by identifying and fixing possible security risks, such as SQL injection or DoS attacks, and developing an application architecture that is impervious to cross-site scripting.
- Continuously add more cybersecurity tools and methodologies with each project.
- Troubleshoot and fix errors on live running projects, even with little description or a niche issue, and utilize source control and peer reviews to ensure quality work.
- Verify clients' intentions and programmers' work using soft skills.

Walmart - Crystal Lake, IL - *Automotive Technician, Electronics Associate, Stockworker*

2015 - 2023

PERSONAL PROJECTS & COLLEGE PROJECTS / CLASSES

Full Stack Personal Project - *VisualStudio, Unreal Engine, SQL, Kotlin, C++, C#*

- Independently researching and learning how to make unreal engine desktop networked applications
- Communication between a Kotlin api, C++ front end and an SQL database pipeline
- https://youtu.be/KFLK5z65_UE

Snake Game Personal Project - *VisualStudio, Unreal Engine, C++, C#*

- Client Server networking enabled and replication is accurate
- Custom classes in addition to efficient use of data structures for position tracking
- <https://youtu.be/YPLpnkaVnYc> , https://youtu.be/rl_8PbJGiV4

Artificial Intelligence - *Python*

- Multiple projects with model free learning as well as a concentration on q learning and markov decision problems

Computer Graphics - *Webgl*

- Multiple projects including texture rendering as well as lighting phong (Fragment Shader) and Gouraud (Vertex Shader) as well as HTML functionalities including camera movement and movement hierarchy

Mobile Development Projects - *Android Studio, java, xml, utilizing android operating system in applications*

- MultiThreaded Application, extending Adapters, Multiple user interface projects, background / foreground operations such as a music player, Calls to data outside of the application, GridLayout, ListView, Fragment Dynamic Layout, Recycler View
- <https://youtu.be/tVhGKrNwsOE>

Arduino Projects - *C, Arduino IDE*

- <https://youtu.be/dru9aRT1ymE>, <https://youtu.be/tBvrf4xesHs>, <https://youtu.be/aEhLb6oM6Yw>, <https://youtu.be/-qtSMZYF1bI>, <https://youtu.be/-CaYCynKQqU>, <https://youtu.be/z3veZUWCGD0>

Computer Design, Data Structures, Computer Networking - *C++, C, Python*

- Binary trees (AVL Tree), graphs, hash tables, garbage collectors, page files, Bellman Ford's, Dijkstra's, networked programs handling lag and latency with acknowledgement messages validating delivery

Java Projects, and Desktop - *Eclipse, Java*

- Using Java and css in order to make gambling games that were multithreaded as well as client server networked

Calculus College Project - *VisualStudio, Unreal Engine, C++, C#*

- In unreal engine with C++ I made a simulation for a calculus project with the mathematical function accurately represented on the user interface
- <https://youtu.be/QK9LbkapbUk>