

Henry Rheault

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EDUCATION

METROPOLITAN STATE UNIVERSITY | BS COMPUTER & INFORMATION SCIENCE St. Paul, MN | Dec 2019
GPA: 3.25

EXPERIENCE

PROGENY SYSTEMS CORPORATION | SOFTWARE ENGINEER (CTR) Manassas, VA | Feb 2020 – Present

- Built write-heavy, robust US Navy information processing systems using Java and Bash
- Increased security by preparing, testing and upgrading our Java version from 8 to 11
- Optimized data recording via PostgreSQL Database Docker Container for processing w/ Hibernate
- Improved company-wide reliability by implementing automatic VirtualBox backups via Batch
- Considered and implemented reliability, security and performance characteristics for battle ready systems
- Improved code quality by resolving static analysis compliance findings

SKILLS

PROGRAMMING LANGUAGES

Java, BASH, Python, Batch, C, SQL, XML, R

TECHNOLOGIES AND FRAMEWORKS

Docker, Apache Camel, Hibernate, GraphQL, ROBOT tests

PROJECTS

UBERCHESS

<https://github.com/HenryR-226/UberChess499>

Chess game with a multithreaded AI, capable of 3x faster move generation than the AI hosted by FreeCodeCamp.

AIRBORNE VECTOR

<https://github.com/HenryR-226/Aircraft-Flight-Path-Calculation>

Assuming level and constant speed flight, calculates the Lat/Long coordinates of a flying object over time. Takes into account Coriolis Effect and Geodesic Earth Shape.

UDP STOP AND WAIT FILE TRANSFER

A UDP file transfer application over LAN (localhost) written in Java for Networking project.

REMEYENDER, COMPUTER VISION SYNDROME PREVENTION | WINDOWS API

A Java system tray application to warn user of long, uninterrupted screen usage and to take a break, for eye health.

UBERCHESS- AVOIDING THE N-SQUARED PROBLEM | ITERATIVE DEEPENING, MINIMAX, ALPHA-BETA PRUNING

preview.tinyurl.com/yawbxswf

Iterative Deepening and avoiding the N-squared problem, an explanation of the optimized brute force patterns applied to the Chess project.

VIRTUALBOX AUTO-BACKUP | BATCH, TASK SCHEDULER, 7ZIP CLI, VIRTUALBOX

<https://github.com/HenryR-226/VirtualBox-Auto-Backup>

A Batch script when, combined with Task Scheduler, automatically compresses a copied VM with 7zip and copies to a remote backup.

UDP-CHECKSUM: MODIFIED ADLER-16

<https://github.com/HenryR-226/UDP-Checksum-Modified-Adler-16->

A modified Adler-16 checksum implementation for UDP packet transfer.