Steven Counterman

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Portfolio: StevenCountermancs.github.io

EDUCATION

DeSales University, B.S. Computer Science
Expected Graduation: May 2026
GPA: 3.98 / 4.00
Relevant Coursework: Operating Systems, Data Structures (C++), Computer Architecture, Database Systems, Networking & Security, Software Engineering, Programming Languages / Compiler Independent Study Project

TECHNICAL SKILLS

Languages: C++, Python, Java, x86 Assembly (32/64-bit), SQL
Concepts: Data Structures & Algorithms, Operating Systems, Compilers, Parsers, Interpreters, IR/AST Design, Networking
Tools/Environments: Linux, Git, VS Code, Eclipse, Oracle, Google Colab, Emacs

PROJECTS

MetASM/RosettASM - Pedagogical Low-Level Programming Toolchain

- Designed and implemented a full compiler front-end including tokenizer, parser, AST, and intermediate representation for a custom educational language
- Built a system for visualizing low-level concepts including registers, stack, memory, pointers, and control flow
- Focused on teaching how high-level constructs translate to low-level representations and assembly operations
- Emphasized step-by-step execution, memory state inspection, and conceptual clarity for learning systems programming

DeSalesU (DeSales University Companion Application in JavaFX)

- Designed modular application for class schedules, grades, and dining hall menu
- Implemented object-oriented architecture using inheritance and polymorphism
- Integrated external data sources (e.g. dining menu API) using a custom web scraper and dynamic UI updates

Database System - Beta University Annual Fund

- Designed relational schema with constraints, triggers, procedures, and views in Oracle SQL
- Implemented business logic and data integrity enforcement at the database layer
- Built Java Swing GUI for interacting with the database (used primarily for testing/demonstration)

Enterprise Network Design Project

- Designed multi-site enterprise network architecture including WAN, LAN, VLANs, SD-WAN, and redundancy
- Selected routing protocols, hardware, addressing schemes, and security architecture
- Produced full technical design documentation and diagrams

EXPERIENCE

United States Army - Infantry
2020-2021

- Operated in high-stress, team-based environments requiring strict procedural compliance
- Maintained equipment, followed operational protocols, and supported unit missions
- Demonstrated reliability, discipline, and accountability in mission-critical situations