Adam I. Richardson

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EDUCATION

University of Denver, Denver, CO **Sep 2020 - Jun 2024**

BS, Computer Science, Minors in GIS and Mathematics

- **GPA:** 3.87
- **Achievements:** Magna Cum Laude
- **Coursework:** Software Engineering, Data structures & Algorithms, Systems Programming, Computer Organization, Operating Systems, Programming Languages, Natural Language Processing, Mathematical Cryptography, Game Programming, Linear Algebra, Quantum Computing, Human-Centered AI, GIS Programming, Computer Cartography, Geographic Statistics, Remote Sensing, Environmental GIS, Geographic Information Analysis

Arapahoe Community College, Castle Rock, CO **Aug 2019 - May 2020**

Associates Certificate

- **Achievements:** Associates Certificate for Cisco Networking
- **Coursework:** CompTIA A+ intro, Cybersecurity, CISCO Networking I, CISCO Networking II, CISCO Networking III

Work Experience

DataAnnotation **May 2024 - Present**

AI Code Tester/Reviewer/Software Engineer

(This is hourly paid gig work)

Technologies used: HTML/CSS/JS, React, Java, and Python

- Rated and reviewed AI-generated code to improve code quality and performance
- Pulled and tested code on a local machine to verify its functionality and identify potential issues
- Created test contexts using databases and JSON to ensure code accuracy and functionality
- Corrected code or responses to enhance accuracy and ensure compliance with project requirements

RELEVANT PROJECTS

RSA Cryptosystem (Java) **May 2023 - Jun 2023**

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- Created a full cryptosystem from the ground up that allows key generation and encryption/decryption.
- Searches for prime numbers by putting 2048-bit numbers through many Solovay-Strassen tests
- Generates the private and public keys and outputs to a file
- Also allows for the entry of keys for encryption/decryption of text
- Used complex data structures & algorithms for exponents, Jacobi symbols, and multiplicative inverses
- Tested the project by sending messages to others with our own systems using public/private key pairs

Quirk2Qiskit (Python/JavaScript) **Mar 2024 - Present**

Personal Project

- Turns quantum circuits made in Quirk into Python code for Qiskit
- Now uses regex on the quirk URL to interpret and recreate the circuit as code
- Translated to JavaScript so it can be run as a web application

Tool for Molecular Diagnostics Lab **Jan 2024 - Mar 2024**

University of Denver *DU*

- Upgraded an old code base for a python command line tool to have a graphical interface with Tkinter
- Upgraded a pipeline for converting EDS files and processing them for importing into a SQL database
- Designed a system for checking MD5 hashes to detect duplicate files before converting for performance
- Used an agile development process with two sprints
- Self-guided skills development for Tkinter and SQL before starting development
- Met with the client regularly for requirements elicitation

SKILLS

- **Programming Languages**: Python, C#, Java, C/C++, SQL
- **Web Technologies**: HTML/CSS, JavaScript/TypeScript
- **Tools & Platforms**: Git, UNIX/Linux, Docker, VirtualBox, GitHub, FastAPI Development
- **Methodologies & Practices**: Agile, SDLC, Software Development Methodologies
- **Computer Science Fundamentals**: Data Structures & Algorithms, Object-Oriented Programming