

Iyobed Zekarias

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Professional Projects

Portfolio (link) - React.js Vercel Javascript Python C++

- Used Nextjs (React framework) to create engaging pages that portray my biggest projects while adding API endpoints using python and C++
- Leveraged caching and concurrent connections for better user performance, completed using C++ WebSockets

Music Streaming App – ios SwiftUI

- Building a music streaming platform in Swift that implemented AVPlayer to allow unlimited streaming experience.
- Used Swift to optimize for 63% better loading speeds

Wooping (link) - C++

- Upgraded the Gnu Multiprocessing Unit Library to include wooping, a check for multiprecision arithmetic
- Researched and implemented math behind checking process developed by Jurjen Bos in his paper *Practical Privacy*. Maintained 99.9% CPU clock speed when checking was turned on.

Cryptography (link) - C++

- Implemented multiple Cryptographic algorithms in C++ including AES, RSA, SHA, and others
- Created my own multiprecision arithmetic library and implemented faster multiplication algorithms using Fast Fourier transformations and implemented concurrency

Experience

Ernst and Young

New York, NY

Technology Consultant, Data and Analytics

June 2022-Present

- Developed and implemented new accounting software at multi-billion-dollar company for better forecasting and presentation of revenue and cost center data allowing the client to better report financial data to shareholders.
- Digested and presented data to client and teammates on client's current business unit allocation process

Technology Risk Management

June 2021-July 2022

- Created an automation tool that advanced old processes and saved multiple teams 100s of billable hours per year
- Tested controls in client IT systems for allowance for doubtful accounts, revenue recognition, write offs, and more
- Analyzed, understood, and documented movements of data from multiple servers to a central location

Core Civic

Nashville, TN

IT Project Management Freelance

August 2020-December 2020

- Oversaw transition to new technologies that would be used by thousands of users

Tractor Supply Company

Nashville, TN

Software Engineering (Columbia State Capstone Student)

August 2019 – October 2019

- Developed Augmented Reality software to view large devices on mobile and saved the company \$50,000
- Created new and innovative products for customers to be used for data analysis
- Co-led a customer counting software integration into stores used for conversion rates and customers per day

Affinity Technology Company

Nashville, TN

Computer Technician Apprentice

June 2017-August 2019

Education

Lipscomb University

Nashville, TN

Bachelor of Science

(Lipscomb, Columbia State Cumulative) GPA 3.85/4.00

Major: Computer Science

- Swift, react native, Python, C/C++, React, HTML/CSS/JS, SQL, mongoDB, API development, and google firebase
- Data Structures and Algorithms, Calculus 1 & 2, Multivariable Statistics, Linear Algebra, and Operating Systems

Minor: Accounting

Columbia State Community College (Transfer Pathway)

Nashville, TN

Major: Computer Science

Graduating GPA 4.0/4.0