

# Iyobed Zekarias

T: (615) 545-2686    E: [iyobedzekarias@gmail.com](mailto:iyobedzekarias@gmail.com)    W: [portfolio](#)    A: W 39th St. NYC    [GitHub](#)

## Experience

### Ernst and Young

New York, NY

Data and Analytics Consultant

June 2022-Present

- Created ADHOC reports and presented data to client and teammates on current business unit allocation process.
- 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.
- Queried and presented data from systems and built actionable decision trees for client to take.
- Worked with DataBricks to implement spark and data visualization with python.
- Researched ML tools that could be used within the company and at clients to better improve workflows.

IT Risk Management Consultant

June 2021-June 2022

- Queried servers to test controls then documented and visualized data efficiency and efficacy.
- Tested controls in client database for allowance for doubtful accounts, revenue recognition, write offs, and more.
- Created an automation tool that advanced old processes and saved multiple teams 100s of billable hours per year
- 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 demo 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.

## External 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 WebSockets

### Music Streaming App – ios SwiftUI, SQL

- Building a music streaming platform in Swift that implemented AVPlayer to allow unlimited streaming experience.

### Wooping (link) - C++

- Upgraded the Gnu Multiprocessing Unit Library to include wooping, a check for multiiprecision 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++

- Created and 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.

## 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