

BILL MERICKEL

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EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY, College of Computing

Atlanta, Georgia

Candidate for Bachelor of Science in Computer Science

May 2024

GPA: 3.97/4.00

- Concentrations: Intelligence and Systems Architecture
- Distinctions: Faculty Honors, Dean's List
- Relevant Coursework: Operating System Design, Machine Learning, Algorithm Design and Analysis, Processor Design
- Study Abroad: Studied startup ideation, customer discovery, and business value propositions in Metz, France for 4 months

EXPERIENCE

AT&T INC.

Atlanta, Georgia

Software Engineering Intern

June 2023 – August 2023

- Developed 8 API endpoints for the ORCA backend infrastructure that connect with the system SQL server and return appropriate objects
- Enhanced ORCA regional backend codebase by developing and implementing unit tests, resulting in a 14% increase in total test coverage
- Conceived an improved scheduling algorithm for the ORCA construction task scheduling software to determine effective time worked

NCR CORPORATION

Atlanta, Georgia

Software Engineering Intern

May 2022 – August 2022

- Crafted 34 Python scripts to automate the process of removing terminated employees as users from the enterprise tools set
- Boosted user removal processing time by 97.25% by eliminating 48 hours of manual labor through pipeline automation
- Nominated for the NCR Software & Technology R&D Excellence Award due to project's processing efficiency

BUSINESS PARTNER SOLUTIONS INC.

Riverside, California

Software Engineering/Sales and Marketing Intern

June 2021 – August 2021

- Proposed a \$600+ per year savings plan with Kubernetes and NeuVector container security platform adaptation
- Authored a 15-page documentation detailing security benefits of application containers compared to virtual machines
- Merged 20 containerization and CI/CD technical documents to illustrate an improved software development life cycle

PROJECTS

TILEVANIA

Atlanta, Georgia

2D Platformer Game

April 2023 – Present

- Designed 10 levels with Unity and C# that include multiple collectibles and hazards, like a retro 2D side-scrolling experience
- Animated 6 various gameplay elements, such as player running and idle stance, hovering coins, and enemy movement
- Incorporated state management for the preservation of player data, such as lives and score, if the player is defeated by enemies or hazards

SPOTIFY UNWRAPPED

Atlanta, Georgia

React Web App

June 2023 – July 2023

- Built a dashboard for visualizing personalized data using the Spotify API with 4 profile-specific features, such as top artists and playlists
- Added feature allowing users to sort tracks in their public playlists by 3 different measures: danceability, tempo, and energy
- Utilized the Spotify OAuth framework to securely enable user login and protection of user data through appropriate permissions

XV6 OPERATING SYSTEM ENHANCEMENTS

Atlanta, Georgia

Kernel Feature Development in C

September 2022 – December 2022

- Achieved 4 kernel feature enhancements, including virtual memory performance improvements and a stack backtrace method
- Refined the kernel thread process scheduler by adding 4 different algorithms, including FIFO and Priority Round Robin
- Augmented the isolation and security of user data by implementing user authentication with a modified hash salt and aes256-encryption

IMMEDIATE ALERT MESSAGING

Riverside, California

Flutter Mobile App

April 2020 – October 2020

- Developed 2 primary screens for sending messages and images to everyone in an organization along with individual and group chats
- Established 3 Firebase app services and integrated 18 package dependencies for user authentication, message database, and cloud storage
- Implemented direct push notifications containing the chat name, sender, and message content upon receiving new messages offline

LEADERSHIP

ALPHA KAPPA PSI PROFESSIONAL CO-ED BUSINESS FRATERNITY

Atlanta, Georgia

Vice President of Finance

May 2022 – April 2023

- Managed, budgeted, and processed over \$60K worth of financial assets and a \$56K annual operating budget
- Led directors to research effective investing strategies and contribute to an equity portfolio valued over \$15K

SKILLS & INTERESTS

Languages: Python, Java, C, JavaScript, Dart, C#, SQL, Apache Groovy

Tools: Flutter, Firebase, Unity, React, Node.js, Express, Git, Render, Gatsby, APIs, Pandas, NumPy, Matplotlib, SciPy, JavaFX

Interests: Scuba Diving, Cinema, Skiing, Hiking, Cooking, Legos