## Jonathan Cirillo

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## EDUCATION

**UNIVERSITY OF CENTRAL FLORIDA** | Bachelor of Science in Computer Science August 2019 - August 2023

## EXPERIENCE

F5 | Software Engineer

- Stack: Python, Docker, GitSwarm, Selenium, Linux
- Supporting F5's next-gen rSeries and VELOS products as a member of the Velocity System Integration team.

#### VS & CO. | Software Engineer Intern

- Stack: Go, Azure, Docker, Kubernetes, CouchDB, Consul, Grafana
- Supported 100+ Go microservices within an Azure Kubernetes Services environment.
- Optimized a core service's performance by transitioning blacklisted user storage from array to map structure, achieving 100x to 1000x faster data lookups. Leveraged CouchDB and Consul for local testing of updates.

#### VS & CO. | Applications Developer Intern

- Stack: C#, Java, SQL, Powershell, Cherwell
- Investigated software issues affecting pin-pads in all North American Stores as a member of payments team.
- Conducted root cause analysis of software bugs potentially impacting millions of customers at 1000+ stores.
- Identified production faults with APIs & firewalls, saving the company from thousands in potential \$ losses.
- Assisted development of new merchandise planning application, boosting productivity for hundreds of staff.
- Created data in MS SQL for quality assurance testing of planning app and validated APIs using SwaggerHub.

#### INFORMA SOFTWARE | Software Engineer Intern

Stack: JavaScript, C#, SQL, Liquid Office

- Created user-friendly forms and business solutions for companies in diverse industries.
- Led research into cloud-hosting solutions, which could potentially diminish existing hosting expenses by 35%.
- Produced comprehensive technical documentation, and facilitated meetings to demonstrate findings.

## PROJECTS

#### AUGMENTED REALITY COOKING SIMULATOR | Lead Back-End Developer

Stack: Flutter, Dart, Unity, C#, Firebase

- Engineered APIs for efficient app-to-database communication and dynamic data presentation to UI.
- Deployed open-source 'GLTFUtility' plugin for real-time instantiating of 3D assets from Firebase storage.
- Conceptualized & constructed a system design model that minimized DB requests saving hundreds in costs.
- Instituted user authentication supporting Google and Facebook, utilizing Firebase for user data storage.

### JAVA CHESS ENGINE & MULTI-THREADED AI | Lead Developer & Project Manager

Stack: Java, LaTeX, IntelliJ, Guava

- Developed a robust Java-based chess engine with a multi-threaded AI using alpha-beta pruning.
- Authored a research paper detailing 270% performance increase achieved through paralellizing alpha-beta.

### SPOTIFY WEB/MOBILE APPLICATION | Project Manager

Stack: JavaScript, MongoDB, Express, React.js, Node.js

- Led the creation and development of 'Trendify', a web and mobile application integrated with Spotify.
- Leveraged Spotify's API, enabling users to sync their data and explore complete listening and track details.

# **TECHNICAL SKILLS**

Programming Languages: Java • Python • Go • C# • C • JavaScript • SQL • Dart • LaTeX Data Management and Tools: Firebase • MongoDB • PostgreSQL • Docker • MySQL • Azure • Kubernetes Libraries and Frameworks: React.js • Node.js • Flutter • Keras • Django • Flask • .NET • Unity • FastAPI

Jan 2022 – May 2022

Aug 2023 – Present

May 2023 - Aug 2023

May 2022 - May 2023

Link to Paper

Link to Project

Link to Website