

# Nicholas Sarullo

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Nicholas Sarullo is a recent computer science graduate and aspiring software engineer

## Technical Skills

- **Languages:** Java • Typescript • Javascript • Python • Swift • SQL • HTML • UML • C# • LUA • CSS
- **Technologies:** Angular • MySQL • Node.js • Firebase • Git Version Control • Unix/Linux Command Line • Eclipse • IntelliJ • PyCharm • VSCode • Unity

## Experience

### Code Ninjas - Lead Instructor

*February 2022 - Present*

- Taught students data structures, logic, conditionals, and other computer science and game development fundamentals utilizing Java, JavaScript, Python, C#, LUA, Unity, and Roblox Studio

### Law Offices of Gaglione, Dolan & Kaplan - IT Consultant

*May 2017 - Present*

- Built custom cloud storage and a functional media server utilizing a router, an internal SSD, and a USB 3.0 to SATA converter cable, in conjunction with Netgear's ReadyShare technology
- Ensured each office branch's connectivity to both the cloud storage and media server through HTTPS and FTP while they concurrently maintained 99.9% uptime
- Disassembled computers to retrieve encrypted data and install new hardware (CPUs, heatsinks, chassis fans, RAM, SSDs, HDs, etc.)

### iD Tech - Instructor

*May 2018 - July 2018*

- Utilized Minecraft console commands to familiarize students with Linux CLI architecture

## Projects

### Distributed Systems Search with Multithreaded Architecture

*Java*

- Implemented a search application with an input double array of up to  $2^{32}$  elements partitioned and distributed among 5 nodes, each with 8 cores
- Distributed the workload in each system utilizing 1 thread per core, effectively increasing efficiency by 8x per machine, and reducing the total search time to 2.5% of the original run

### Finance Startup

*Java, Python, TypeScript, Angular, SQL, AWS, NoSQL, PostgreSQL*

- Worked on a team implementing frontend Angular UI while hosting the web app with AWS Amplify, utilizing S3 for hosting and storage as well as Cognito for user authentication, capable of scaling to support thousands of users
- Assisted designing REST API with Java AWS Lambda Functions as microservices connecting user and app data with multiple databases from other services such as AWS Aurora and DynamoDB

### Designed Database for "The Tennis Shack" in MySQL

*Java, SQL, MySQL, LucidCharts*

- Implemented full ELT workflow through extraction of large CSV files, ingestion of over 100GB of data, and transforms through Java code
- Created a relational data model for RDBMS architectures that mapped out the relationships between over 20 highly populated tables

### Recipe Saver & Cookbook Creator Client-Server App

*JavaFX, SQL, UML, MySQL*

- Created a client-server JavaFX application with a GUI capable of querying and changing over 1,000 MySQL database table elements
- Utilized iText 7's API to generate over 100 PDFs resembling physical cookbooks, each consisting of an arrangement of between two and 250 user-chosen recipe-related images
- Implemented visual recipe and cookbook title, image, and tag search and browse functionality

## Education

### California Lutheran University, Thousand Oaks

- B.S. Computer Science, 2021 - GPA: 3.846