Nicholas Paul Chaloult

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Education

August 2017 — **Georgia Institute of Technology**, *Atlanta, GA*.

December 2021 • Candidate for Bachelor of Science in Computer Science

(Expected) • Threads: Intelligence, Info & Internetworks

o GPA: 3.86/4.00

Experience

September 2020 — Software Engineering Intern, Ultimate Software, Atlanta, GA.

December 2020 o To be determined

June 2020 — MLH Fellow, Major League Hacking, Remote.

- August 2020 Selected as one of 144 Fellows from a pool of 20,000 applicants to be a member of the Fellowship's inaugural class
 - o Collaborated with Amazon engineers on AWS Amplify: an open-source framework for leveraging AWS services in mobile and
 - o Implemented functionality that allows users to write, test, and deploy Lambda functions with Swift through the Amplify CLI
 - o Wrote user-facing documentation and guides, as well as developer-facing design documents

May 2019 — **Software Engineering Intern**, *DataScan*, Alpharetta, GA.

- August 2019 Established pattern for new REST API endpoints that perform lightweight existence/authorization checks for subresources
 - o Relocated frequently accessed, but rarely modified, information from an Oracle database to a Redis in-memory cache

January 2018 — Rise Up Undergraduate Assistant, College of Computing, Georgia Institute of Technology, Atlanta, GA.

- Present Lead weekly webinars and monthly in-person sessions, explaining and demonstrating fundamental computer science concepts to Georgia high school students
 - Helped organize and run the 2018 and 2019 AP Bowl, during which over 300 Georgia high school students took a mock AP Computer Science exam

Personal Projects

Codenames, Web Application.

An interactive implementation of the Codenames board game.

- o Users may create new games or join ongoing ones, and interact with the game board in real time
- React web application clients communicate with a Go server via persistent Websocket connections
- o Go server manages game states and notifies clients of any changes, and persists games to a Postgres database
- Server and database are deployed in containers on Heroku; web application is hosted with Firebase

Many Voices for Museums, Cross-Platform React Native Application.

A more interactive and customizable alternative to existing audio tours in museums and art galleries.

- Users may choose to hear multiple audio critiques of each artwork on display in whichever order they like
- o React Native application fetches and displays content from an AWS S3 bucket through the AWS SDKs for Node.js

Kindling, Web Service.

A home for "first Tinder message" ideas that disappear after twelve hours.

- o Message suggestions may be posted anonymously, upvoted, downvoted, and flagged as inappropriate
- o REST APIs written in Go facilitate communication with Postgres database to perform basic CRUD operations
- o Cron job runs periodically, purging all message suggestions older than twelve hours from the database

Involvements

August 2019 — **GT Solar Racing**, *Telemetry Team Member*.

- Present o Redesigned an existing two-way telemetry message protocol to support many more types of messages to the car
 - o Maintaining Go server that listens for and processes car vitals in real time via a TCP connection
 - o Integrating Grafana visualization tool with InfluxDB to easily monitor the state of the car as it races

Skills and Attributes

Languages TypeScript, JavaScript, Go, Java, Python, Swift, HTML, CSS

Frameworks React, Redux, React Native, Express, Spring, Jest

Tools Git, Docker, Travis CI, JIRA, Confluence, LATEX

Technologies GNU/Linux, Amazon Web Services, Node.js, PostgreSQL, Grafana, InfluxDB, Redis