Ata Altyyev

209-446-7533 | altyew44@gmail.com | linkedin.com/in/ataha322 | github.com/ataha322

Education

University of California, San Diego La Jolla, CA, 9500 Gilman Dr

Bachelor of Science, Mathematics and Computer Science *Expected January 2024*

- **Relevant Coursework** :
  Intro Object-Oriented Programming (Java), Advanced Data Structures, Algorithms, Systems Programming (ARMv8 Assembly), Components and Digital Systems (RTL design, boolean logic), Theory of Computations (Finite Automatons and Turing Machines), Discrete Mathematics, Abstract Algebra, Combinatorics, Software Tools, Relativity and Quantum Mechanics.

Projects

Planner.xyi | *Web-application* June 2022 – Present

- Planner/Calendar/Notepad application. Initially implemented as a web app but will be ported on android. The structure is simple: User-Task interaction. Task modules communicate with user modules through binded UserId's, which allows to store multiple users with their private tasks. Features implemented: registration, login, sort and search, deadline counting, email verification, authentication.
- Wrote the backing code with Golang due to the use of the GORM library and use of concurrency with goroutines.
- Packaged this program into the docker container for its easy portability.
- Stored data in MySQL tables. Cached and encrypted the data with Redis and JWT respectively.
- Frontend was implemented with the use of VueJS, Nuxt.js, and Vuetify.
- Group Project: backend - *Ata Altyyev*(me), frontend - *Boris Ryabov*.
  https://github.com/ataha322/planner.xyi https://github.com/dzodkin33/planner-front

Online Store | *Web-application* April 2022 – Present

- Online Store application with interface for 3 types of users - admin, ambassador, and client. Features implemented: registration, login, auto-emailing, sorting of products, sorted searching, collecting statistics, processing payments (through Stripe API)
- Technologies used: backend language - Golang, platform - Docker, database - MySQL, caching - Redis, encryption - JSON Web Token, payments - Stripe, emails - SMTP, concurrency - goroutines. Frontend: VueJS, Nuxt.js, Vuetify. Backend is fully functional, frontend is in progress.
- https://github.com/ataha322/online-store-backend

Newton's box | *2D Gravity simulation* July 2022

- 2D planet gravity simulation. Moon rotates around its planet where planet is a movable object to demostrate changes in inertial and accelerated frames.
- Used C++ and SFML library to implement two key objects: planet and its moon. Gravity calculations are made in the moon object, with planet object passed in. Planet is movable, simulation is resettable, window frames are adjoint.
- Technical details: $F = G\frac{m_1 m_2}{d^2}$
- https://github.com/ataha322/newtonBox

HackMerced V | *Hackathon project* February 2020

- Gym app for Android. App was supposed to recognize gym equipment and display the corresponding exercise from YouTube. My work: open the gallery, import the selected image, display on the main menu; feed 300 images of basic gym equipment to ML Kit.
- Technologies used: Kotlin, Android Studio, ML Kit.
- Accomplished: Main menu and picture selection worked out. Image recognition worked on the gym equipment.
- https://devpost.com/software/myexercise

Technical Skills

Languages: C/C++, Golang, Java, Python, Pascal, ARM Assembly, TypeScript
Libraries & Frameworks: Docker, Redis, Gorm(MySQL), Fiber, JWT, Stripe, VueJS, Nuxt.js, Vuetify, SFML, Faker
Developer Tools: GDB, Valgrind, Linux, Git, bash & make scripts, RaspberryPi (C-code, ARM-code), LaTeX
Side Skills: ASM reverse engineering, Golang TDD, Matlab
Miscellaneous: Burnt serial programmer by connecting two power sources, DVD-like bouncing screensaver