# Ikram Gabiyev

igabiyev22@amherst.edu | (413) 801-0335 | https://github.com/IQ01660
16 Barrett Hill Dr. AC#0489, Amherst, MA, 01002

## EDUCATION

**AMHERST COLLEGE,** Amherst, MA — *Expected, May 2022*

*Bachelor of Arts in Computer Science and Physics*

- Cumulative GPA: 3.92/4.00
- Relevant Coursework:Data Structures, Algorithms, Networks, Machine Learning, Computer Systems, Introduction to Computer Science II, Linear Algebra, Signals and Noise Lab
- Technical Skills: Proficient: Java, Javascript, Python, React, React Native, Expo, Node, HTML/CSS, Git, NoSQL; Exposed to: C#, C, x86 assembly, Firebase, p5.js, Processing, SQL

## WORK EXPERIENCE

**AMHERST COLLEGE,** Amherst, MA — *January - May 2020*

*Physics TA and Grader, Computer Science Department Peer Tutor*

- Facilitated help sessions and graded homework of 18 students for the lab section of PHYS 109 (Energy) course
- Held one-on-one tutoring sessions with a student in **Introduction to Computer Science I** course, resulting in student's overall grade increasing by more than one letter grade

## PROJECTS

**LOUNDR APP** | Javascript, React Native, Firebase, Stripe

- Developed a mobile app (both for Android and iOS) that facilitates transfer of funds between users in the CIS region by integrating **Stripe** and local payment processors' services into a **React Native** application ( **https://bit.ly/2YrGhhI** )
- Utilized **Firebase API** in the app and distributed app's demo version to about 300 people, with about 200 authenticating and had over $320 handled in transactions as of July 30, 2020

**BEEPH APP** | Javascript, Node

- Used **Node.js** along with **Express**, **MongoDB**, **EJS** template engine, **Socket IO**, and **Twitter API** to develop a social network for Amherst College students to facilitate the arrangement of events and meetings by 5 different clubs and organizations, including Amherst College Association for Computing Machinery

**MAZE GENERATOR AND SOLVER** | Java

- Implemented a **Disjoint-Set data structure** to generate n-by-n mazes of any size in **Java**
- Implemented a **Graph** with an adjacency matrix and used **Depth First Search** to solve generated mazes

**DATA LINK LAYER SIMULATION** | Java

- Designed a simulation, in **Java**, of *Data Link Layers* transferring data on a network segment through Physical Layers and a low noise medium that randomly flips bits sent from a host.
- Accomplished to increase the detection of errors in data transfers by an average of 400%, by using ***Cyclic Redundancy Checks*** instead of parity bits, as measured by comparing the bytes in sender's buffer to those in receiver's output
- Programmed the *Flow Control* between the two Data Link Layers by implementing the ***Stop-n-Wait ARQ***

**ANTIBIOTICS-ADAPTATION** | Java

- Designed a simulation in **Java** that executes a genetic algorithm to demonstrate the adaptation of bacteria to Amoxicillin