Rumi Khamidov

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EDUCATION

Virginia Tech — Blacksburg, Virginia
B.S. Computer Science, Mathematics Minor; GPA: 4.0 — **May 2026**
Organizations: BOLT, Russian-Speaking Student Association, SASE, CS Careers, MLH, VioletHacks

Relevant coursework: Software Design and Data Structures, Problem Solving in CS, Computer Organization, Multivariable Calculus, Discrete Math

SKILLS

Languages: Java, JavaScript, Python, CSS, HTML, LaTeX, C/C++, SQL, Bash, MatLab
Tech Stacks: React, React Native, Expo Go, Git, Axios, Express, NodeJS, PostgreSQL, XCTU

PROJECTS

HackViolet 2024 WINNER: Baby Blues
- Constructed the 'Best Hack (app) to Support Women' that implements **Hume AI API** to quantify emotions based on speech (on a confidence scale of **0.0 - 1.0**) in tandem with **Spotify's API** to recommend playlists as part of music therapy for women suffering postpartum depression.
- Coordinated the team and was the lead designer for the front-end using **React Native** and **Expo Go** to create a minimalistic **UI/UX** with playable embedded Spotify playlists and graphs of the most common emotion expressed throughout the day.

Personal Workout Schedule
- Developed a daily updating schedule of my planned gym workouts for the week using concepts such as a **queue** data structure, local storage, and front-end **CSS** customization via **JavaScript** and the **React** library.
- After the creation of an initial template of the next **7 days**, the user can choose to change the schedule by editing the focus type of the day and specific workouts associated with each day.

BOLT: Wireless Communications
- Established the functionality to wirelessly transfer **64 - 128 bytes** of encrypted data every **500 milliseconds** using **XBee** transmitters.
- Worked in collaboration with the **CAN Testbench team**, which gathered the performance and analytical data from the motorcycle, as we successfully sent and recieved information through **XCTU**.

RESEARCH

VizPI — Virginia Tech
Contributor — **Jan 2024 – Present**
- VizPI is an **interactive web tool** focused on providing instructors with a way to monitor, assess, and conduct real-time programming exercises in one, simple and effective, environment. With constant feedback from professors and students, VizPI utilizes an **Agile Methodology** to ensure the effectiveness and usefulness of the tool.
- Refactored front-end database calls from **Firebase** to **PostreSQL** through **Node.js** via secure fetch requests using **Axios** and established custom **APIs**.
- Remodeled the UI/UX of the webpage's create-a-session prompt, list of previous sessions, and student error visualization using the **MUI** and **React** libraries to ensure a sleek yet informative design on the instuctor end of the product.

EXTRACURRICULARS

BOLT — Virginia Tech
Project Contributor — **Oct 2023 – Present**
- Club Description: A design team of VT Engineers spearheading the construction of a fully electric motorcycle used for competitions, hands-on experience working with a team, and collaborating on interdisciplinary projects within BOLT.
- Role: Remodeled the controls design and established data collection and dispersion algorithms for the electric motorcycle.

Russian Speaking Student Association — Virgnia Tech
Member — **Sep 2023 – Present**
- Promoted Russian and Russian-speaking cultures and traditions in Virgnia Tech and connected with peers through our common language and similar backgrounds.
- Personally spread Tajik culture through food, presentations of the beautiful landscape, and anecdotes from my time there, as the sole representative of Tajikistan.

Society of Asian Scientists and Engineers — Virginia Tech
Member — **Jan 2024 – Present**
- Promoted inclusion and diversity within the university and the club itself along with, specifically, other Central Asian members.