Rumi Khamidov

☐ +1 703-386-6727 | @ rukham004@gmail.com | 🔗 rumi-khamidov | ⧉ rkh4m | 📍 Washington D.C.

EDUCATION

Virginia Tech   Blacksburg, Virginia
B.S. Computer Science, Mathematics Minor; ***GPA: 3.72***   ***May 2026***
Organizations: BOLT, Russian-Speaking Student Association, SASE, CS Careers, MLH, VioletHacks

Relevant coursework: Data Structures and Algorithms, Problem Solving in CS, Computer Organization, Multivariable Calculus, Discrete Math, Applied Combonitorics and Graph Theory

SKILLS

Languages: Java, JavaScript, Python, CSS 3, HTML 5, LaTeX, C/C++, SQL, Bash, MatLab
Tech Stacks: React, React Native, Tailwind CSS, Expo Go, Git, Axios, Express, Bootstrap, NodeJS, PostgreSQL, XCTU

RESEARCH

ClassX   George Mason University
REU Intern   ***June 2024 – Present***
- Back-end and research & development intern for ClassX: an **AI-based**, semi-auto labeling tool funded by **NASA, NSF. and GMU** with services in the Arctic and Heliophysics (solar) research fields.
- Constructed a RESTful Python export script for the images and masks from the tool and offers support for exporting in mutiple file types like **8 and 16 bit PNG, HDF5, JPG, COCO, etc.** in less than **4 seconds**.
- Presented at the **2024 Spatiotemporal International Symposium** about the refactoring and modularization of the previous iteration of the project using **Flask**, a lightweight Python web framework.

Prime Lab: VizPI   Virginia Tech
Contributor   ***Jan 2024 – May 2024***
- Worked directly with Virginia Tech professors, researchers, and Computer Science Department faculty members to provide an interactive Java and Python programming learning tool utilizing AI for over **200** undergraduate students.
- Overhauled **REST API** calls to ensure seamless backend integration, migrated data handling from Firebase to **PostgreSQL** via secure fetch requests using **Axios and Express**, contributing to robust application development.
- 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.

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.

Project Torch: The Burg Website
- Built a responsive **Vite + React** website for a local business in Blacksburg for free in a team of other Virginia Tech computer science students.
- Created the home page and navigation bar using the **Bootstrap and MUI** React libraries with **Tailwind CSS** for extra customization and creating a unique visual design.

BOLT: Wireless Communications
- Established the functionality to wirelessly transfer **64 - 128 bytes** of encrypted data every **500 milleseconds** 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**.

EXTRACURRICULARS

BOLT   Virginia Tech
Software Developer   ***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.