

# Rumi Khamidov

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## EDUCATION

### Virginia Tech

*B.S. Computer Science, Mathematics Minor; GPA: 3.74*

Blacksburg, Virginia

*May 2026*

**Organizations:** BOLT, Russian-Speaking Student Association, SASE, CS Careers, MLH, VioletHacks

**Relevant coursework:** Data Structures and Algorithms, Computer and Operating Systems, Multivariable Calculus, Discrete Math, Applied Combinatorics and Graph Theory

**Awards:** 2024-2025 American Bureau of Shipping Scholarship recipient, Dean's List (Spring 2024 and Fall 2024 (with distinction), Fall 2023), VTHacks and HackViolet Winner

## SKILLS

**Programming Languages:** Python, Java, TypeScript, JavaScript, CSS 3, HTML 5, Bash, SQL, LaTeX, C/C++

**Tech Stacks:** Docker, Flask, React, React Native, Tailwind CSS, Expo Go, Git, Axios, Express Framework, NodeJS, PostgreSQL, MySQL

## WORK EXPERIENCE

### Appian

*Incoming Software Engineering Intern*

McLean, VA

*Summer 2025*

### National Science Foundation

*Software Engineering Intern*

George Mason University

*June 2024 – Present*

- Presented ClassX: the Machine Learning based, **NASA, NSF, and GMU** sponsored, project at the **2024 Spatiotemporal International Symposium**.
- Optimized **Docker** image size of web app and environment with a **65%** size reduction and over a **60%** decrease in build time through **multi-stage building** and **volume mounting** using Agile methodology.
- Constructed a RESTful image and mask Python export script from the tool and offers support for exporting in multiple file types like **8 and 16 bit PNG, HDF5, JPG, COCO, etc.** in less than **4 seconds** for over **100 cropped images**.

### Prime Lab

*Software Engineering Intern*

Virginia Tech

*Jan 2024 – May 2024*

- Provided an interactive Java and Python programming learning tool, VizPI, utilizing AI for over **200** undergraduate students.
- Redesigned **REST API** calls to ensure seamless backend integration, migrated data handling from Firebase to **PostgreSQL** database via secure fetch requests using **Axios and Express**, contributing to robust application and web 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 instructor end of the product.

## PROJECTS

### VTHacks 2024 WINNER: VisionLink

*September 2024*

- Engineered the 'Best Diversity, Inclusion, and Equity Hack' via an AI-implemented, object-detecting visual aid inspired by the **over 400 visually impaired** students at Virginia Tech.
- Implemented haptic feedback that activates based on proximity parameters: **1.5 meters, 1 meter, and 0.5 meters** and increases in intensity as the user gets closer to objects, people, hazards, etc.

### HackViolet 2024 WINNER: Baby Blues

*February 2024*

- Constructed the 'Best Hack 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

*April 2024 – June 2024*

- 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.