

ABRAR RHINE

Software Engineer | AI/ML Engineer



EDUCATION

Virginia Tech | Blacksburg, VA.

Master of Engineering in Computer Science (Concentration: Data Analytics & AI) – GPA: 4.0 Expected Graduation: May 2023 Bachelor of Science in Computer Science (Minor: Mathematics) – GPA: 3.57, Cum Laude. Graduation: May 2022

Northern Virginia Community College | Annandale, VA.

Associate of Science in Engineering and Computer Science – GPA: 3.52, Magna Cum Laude. Graduation: May 2020

Related Coursework: Advanced Machine Learning, Artificial Intelligence, Natural Language Processing, User Interface Software, Software Engineering, Mobile Software Development, Data Structures & Algorithms, Theory of Algorithms, Computer Systems.

SKILLS

Programming Languages: Java, Python, C, C++, Kotlin, Go, C#, R, HTML, CSS, JavaScript, PHP, SQL, ABAP, Ruby, Solidity. **Tools:** AWS, SAP, GCP, Linux/Unix, TensorFlow, PyTorch, NumPy, Scikit-learn, Matplotlib, Node.js, Docker, Kubernetes, Git. **Databases & Frameworks:** Firebase, MySQL, MongoDB, SQLite, React, Angular, Bootstrap, Django, Laravel, Ruby on Rails. **Other:** Problem Solving, Critical Thinking, Leadership, UX Design, Sketching, Painting, Typography, Technical Writing (LaTeX).

EXPERIENCE

Software Development Engineer Intern, Raytheon Technologies (Collins Aerospace) | Charlotte, NC. May 2022 – August 2022

- Developed application solutions using ABAP, HANA and SQL, and GUI which are used by 750+ technicians on daily basis.
- Increased user productivity by 50% by developing GUI using SAP Screen Personas and automating tasks using JavaScript.
- Optimized the performance of existing features by refactoring code, conducting usability testing, data analysis and research.

Web Developer, Department of Mathematics at Virginia Tech | Blacksburg, VA.

November 2021 – May 2022

- Provided 500+ students with study materials by developing webpages using PHP, HTML/CSS and stored all data in MySQL.
- Improved usability and increased users' average time on the website by 80% by modifying existing and adding new web pages.

Computer Science Ambassador, Virginia Tech | Blacksburg, VA.

July 2021 – May 2022

- Held weekly info-sessions, assisted with events for the career fairs and staffed various open houses with a team of 24 people.
- Increased yearly enrollment by 17% by engaging with prospective students about opportunities in Computer Science at VT.

Blockchain Bootcamp Attendee, Virginia Tech Blockchain Initiative | Blacksburg, VA.

March 2022 – April 2022

- Developed specialty in the areas of blockchain including crypto, NFTs and smart contracts, and expertise in **Solidity**.
- Analyzed how businesses integrate blockchain into supply chains, protect software systems, and prevent information retrieval.

PROJECTS

Transaction Classifier (Solo Project: Machine Learning & Natural Language Processing)

June 2022 – July 2022

- Built a model to predict categories of transactions and identify frequent purchases using TensorFlow, NumPy & Scikit-learn.
- Achieved 88% accuracy in predicting categories of 10,000 unique transactions by training the model with 40,000 transactions.

Personal Web and Video Server (Solo Project: Networking & Security Software)

April 2022 – May 2022

- Built a personal web server that can serve files, stream MP4 videos and provides a token-based authentication API using C.
- Designed user interface using **React.js** and achieved 100% accuracy (0 vulnerability/software defect) when tested on Fuzzer.

CourseWiki (Group Project: Web Application Development)

February 2022 – May 2022

- Created a platform which allows 32,000+ students to register for classes, autogenerate class schedule and trade study materials.
- Implemented schedule generator using Python and marketplace using React.is, and stored user data in Firebase database.

Textbook Buddies (Group Project: Mobile Application Development)

February 2021 - May 2021

- Built a textbook trading android app for Virginia Tech students using Android Studio (Java) with a team of four people.
- Developed prototype using **Figma**, designed and implemented the login system and the homepage, and stored data in **Firebase**.

CERTIFICATIONS & AWARDS

❖ AWS Machine Learning Certification (Valid till 09/2025)

❖ AWS Developer Certification (Valid till 09/2025)

Dean's List: Virginia Tech: Spring 2021, Spring 2022; NVCC: Fall 2018, Spring 2019 (President's List).

Scholarships: VTNETS: \$20,000 towards undergraduate study; VT Talent Graduate: \$15,000 towards graduate study.

LEADERSHIP & CAMPUS ACTIVITIES

XYZ Art Gallery, Art Gallery Lead (August 2021 – May 2022): Organized art exhibitions and sold \$10,700 worth of artworks. Google Developer Students Club at Virginia Tech, General Member (2020 – 2022): Attended hands-on-workshops about Flutter. Virginia Tech AI & ML Club, General Member (2020 – Present): Attended weekly meetings and discusses various ML models.