

Ryan Alexander Ragasa

Preferred: Ryan Ragasa

[LinkedIn](#) | [GitHub](#) | [Personal Portfolio](#)

Stephens City, VA

Email: ryanaragasa23@gmail.com

Mobile: -- Omitted --

EDUCATION

Virginia Tech, Blacksburg, VA
B.S. in Chemical Engineering (Cum Laude)
Minor: Computer Science GPA: 3.46

Aug 2019 – May 2024

SKILLS SUMMARY

- **Languages:** Java, JavaScript, HTML, CSS, Python, MATLAB, C#
- **Frameworks/Libraries:** Bootstrap, React, Express, Node
- **Developer Tools:** VS Code, Eclipse, Unity, Git, Bash, Firebase, Jupyter
- **Soft Skills:** Collaboration, project management, excellent communication

PROJECTS

Front-End Projects | *JavaScript*

- Created five projects using React.js and bootstrap as part of a static single page application. The projects included building a random quote machine, markdown previewer, drum machine, calculator, and pomodoro timer.
- Deployed through GitHub Pages for the hosting service.

ChE Machine Learning | *Python*

- Developed a random forest regressor in Python to predict gas holdup in a bubble column with 14 features, achieving 95% accuracy. I enhanced model efficiency through dimensionality reduction, optimization of model parameters,
- Analyzed feature importance and presented insights on extending models' relevance to industrial processes and academic research.

Personal Website | *HTML, CSS, JavaScript*

- Created a personal portfolio website with vanilla HTML, CSS, and JavaScript to showcase my skills in chemical engineering and web development.
- Deployed through firebase for the hosting service.

WORK EXPERIENCE

Virginia Tech, Blacksburg, VA
Undergraduate Research Assistant

May 2024 – July 2024

- I created a presentation on equivariant graph neural networks for Dr. Hongliang Xin's research group, focusing on the Allegro and Mace models used in computational chemistry to support non-adiabatic molecular dynamics simulations.

WestRock Company, Richmond, VA
Research & Development Co-Op

Sep 2022 – Dec 2022

- I worked in a team-oriented environment focusing on two major projects. The first project included support for usage of micro-fibrillated cellulose at paper mills by per. The second project included characterizing contents of recyclable paper by starch, ash, organic, and moisture contents to create a recyclability database.

Evonik, Hopewell, VA
Plant Engineering Intern

May 2022 – Aug 2022

- I worked in a high-paced environment where I coordinated with operations, engineers, and maintenance to complete tasks and assignments. I supported and developed production documentation such as piping and instrumentation diagrams and process hazard analysis.