

Andrew Barbour

Software Engineer

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Software engineer with experience ranging from developing and maintaining front-end apps to architecting and maintaining CI/CD pipelines

Skills

JavaScript, TypeScript, React, Redux, HTML, CSS, Node, Java, Python, SQL, Bash/Shell, data visualization, cloud infrastructure, responsive design, accessibility, test-driven development

Experience

Software Development Engineer, Altair, Altair One Team, November 2022 - Present

- Built the front-end for a digital twin cloud app with React and TypeScript from concept to MVP in a month
- Developed and maintained the plot viewer application with React and TypeScript for viewing, editing, and sharing plot files within the Altair One Drive
- Contributed to the development of the 3D Viewer used within the Altair One Drive
- Maintained the drag and drop library used in multiple applications across Altair One

Software Development Engineer, Altair, Information Development Team, August 2021 - November 2022

- Developed core Javascript application front-end features, including offline access tools, dark mode, and search components
- Created Python apps and workflow tools to automate internal processes and make code-intensive workflows accessible to low-code team members
- Architected and maintained the team's CI/CD pipeline and GitLab infrastructure for several dozen products
- Planned and oversaw the team's migration from Perforce to GitLab

Intern, Altair Engineering, May 2021 - August 2021

- Developed JavaScript and Python application features for workflow help tools and simulation software
- Created Python prototypes of new application features like in-application tutorials
- Built apps to automate data collection and conversion

PhD Candidate, UC Berkeley, 2014 - May 2021

- Researched and wrote a dissertation on engineering and literature that won numerous grants, awards, and prizes
- Designed and taught 7 literature, science, and engineering courses as the sole instructor

Education and Training

Epic React, 2022

Completed all units of an industry-leading seminar on best practices for developing React applications at scale

Ph.D., English | University of California, Berkeley 2021

Engineering and literature

B.A., English with highest honors | UNC-Chapel Hill 2013

with coursework in Computer Science