



Backend Engineer — Computer Algebra System

Location: New York City or Remote

The traditional college model of learning hasn't fundamentally changed in centuries. We've seen technology touch every aspect of our lives and yet today's students are still handed static textbooks and passively listen to professors lecture as they did in the middle ages.

101edu transforms higher education with our active learning platform for STEM courses. We focus on elegant, discipline-specific interactive assessment tools that triumph over generic multiple choice systems and antiquated online homework. Our first product for college chemistry, Chem101, has been quickly adopted at over 400 higher ed institutions and we're just getting started. Check out some of our innovative work here: www.101edu.co.

We're a VC-backed team of scientists, engineers, and educators who are redefining the way students learn and interact with their subject-matter. We're looking for a backend engineer with a keen interest in mathematics, particularly symbolic math. You will work directly with the CTO to develop a brand new computer algebra system (CAS) that handles high-school level algebra. This CAS has special properties having to do with inferring student mistakes and generates feedback in the same way a human tutor would. This may truly be the most exciting and interesting project of your career. The ideal candidate must be strong in mathematics, data structures and algorithms, as well as object-oriented programming.

Tech Stack:

The tech stack for the CAS is under active deliberation. Come join the discussion! Our general backend application stack is:

- Spring backend using MongoDB as our primary database
- AWS infrastructure with services running on ELB and Lambda

Requirements:

- Mission driven: you know the traditional model of learning is broken and you want to do something about it
- Strong knowledge of object-oriented design patterns
- Strong knowledge of algorithms and data structures
- Strong work ethic: we're here to change education and have aggressive goals to do so

Good to Haves:

- Experience with computer algebra system design
- Background in a STEM field
- Experience with Java, Javascript, and Dart
- Experience working in a cross-functional environment

101edu is committed to being a safe place to work and grow for all human beings. We are an equal opportunity employer. All applicants will be considered for employment without attention to race, color, religion, sex, sexual orientation, gender identity, national origin, veteran or disability status.

If interested, please submit your resume and any other relevant info to Igor Belyayev at igor@101edu.co