

PROJECT 01

Application Review Assistance

Jefferson County Business Innovation & Technology

3–5 students

Company background

Jefferson County Business Innovation & Technology (BIT) provides technology-based information systems and communication services to the County and its residents so they can accomplish their business objectives. BIT supports Jefferson County's vision of innovative, efficient, equitable, and quality public services through innovation, collaboration, and efficient and secure service delivery. The Innovation Team partners with County departments to evaluate and implement technologies that improve services, strengthen data-informed decision-making, empower employees, and advance strategic collaboration.

Problem statement

How might we design a reliable method, workflow, or technological solution that can help our hiring staff quickly and accurately detect low-quality or AI-generated applications, reduce screening time, and improve the overall quality of our candidate pool?

Problem context

We are experiencing a significant increase in job applications that appear to be generated or heavily assisted by AI tools. These applications often include resumes with identical wording, inconsistent or inflated qualifications, and candidate responses that do not align with the experience described in their submitted materials or on social media. As a result, hiring teams are spending substantial time sorting through inauthentic applications, making it increasingly difficult to identify qualified candidates and ensure a fair, efficient hiring process.

Description of the work to be done

- Work with Jefferson County stakeholders to understand the current application-screening workflow, pain points, and review criteria.
- Design and develop a reliable method, workflow, or technological solution that supports faster and more consistent identification of low-quality or potentially AI-generated applications.
- Explore ways to identify recurring wording, inconsistencies, unsupported qualifications, or misalignment across submitted application materials while keeping staff oversight central to the process.
- Create an interface or workflow that allows hiring staff to review relevant indicators, understand why an application was flagged, and make the final screening decision.
- Test the proposed solution for usefulness, reliability, usability, and its ability to reduce staff screening time.
- Document the solution, assumptions, limitations, testing approach, and recommendations for future development or implementation.

Desired student skill set

Students are expected to learn new technologies and languages during the course. The following interests or skills would be helpful, but are not intended as prerequisites:

- Interest in applied artificial intelligence, natural-language processing, text analysis, or data analysis.
- Experience or interest in user-centered design, workflow mapping, and application development.
- Ability to think carefully about reliability, explainability, privacy, fairness, and human oversight.
- Comfort learning and evaluating new technologies, libraries, or programming languages as needed.

Work location and participation

Jefferson County Business Innovation & Technology is located at 3500 Illinois Street, Laramie Building – Suite 2500, Golden, Colorado 80419. The expected remote, hybrid, or on-site work arrangement has not yet been specified and should be confirmed before submission. If on-site work is required, mileage expectations should follow the course guidance.

Confidentiality and intellectual property

No non-disclosure agreement requirement has been specified. No requirement to assign intellectual property rights to Jefferson County has been specified; under the course's stated default, students will retain ownership of their work and all artifacts produced unless the proposal is updated before submission.