

# Product Requirements Document (PRD)

## AI-Powered LaTeX CV Generator

### 1. Overview

The AI-Powered LaTeX CV Generator is a web application designed to help students create professional-looking CVs using LaTeX templates without requiring any knowledge of LaTeX. Users input their information through a user-friendly interface, and the application leverages AI to generate a properly formatted LaTeX document that is then converted to a downloadable PDF.

### 2. Target Users

- College students and recent graduates
- Job seekers without LaTeX experience
- Career center advisors helping students
- Academic professionals needing standardized CV formats

### 3. User Stories

- As a student, I want to input my information in a simple form so that I can generate a professional CV without learning LaTeX.
- As a job seeker, I want to select from different CV templates so that I can create a CV that fits my industry standards.
- As a user, I want to preview my CV before downloading it so that I can make adjustments if needed.
- As a user, I want to download my CV as a PDF so that I can submit it for job applications.
- As a user, I want to save my information so that I can update my CV in the future without re-entering everything.

### 4. Product Features

#### 4.1 Core Features

- User-friendly form interface for entering CV information
- Section-by-section data entry (Personal Info, Education, Experience, Skills, etc.)
- AI-powered formatting and organization of CV content
- LaTeX code generation based on user input
- PDF generation and download
- Basic template options

#### 4.2 Future Enhancements

- Multiple template designs with preview options
- Save and edit functionality

- User accounts for CV management
- Export to additional formats (DOCX, HTML)
- CV analytics and improvement suggestions
- Internationalization support

## **5. Requirements**

### **5.1 Functional Requirements**

- The system shall allow users to input personal information (name, contact, etc.)
- The system shall allow users to input education history
- The system shall allow users to input work experience
- The system shall allow users to input skills, languages, and certifications
- The system shall allow users to input projects and publications
- The system shall generate LaTeX code from user input
- The system shall convert LaTeX to PDF
- The system shall allow users to download the generated PDF
- The system shall provide feedback on input completeness

### **5.2 Non-Functional Requirements**

- The system shall be responsive and accessible on desktop and mobile devices
- The system shall process and generate CVs within 10 seconds
- The system shall support simultaneous use by at least 100 users
- The system shall maintain data privacy and not store personal information without consent
- The UI shall be intuitive enough for users with no technical background

## **6. Constraints**

- Initial integration limited to free tier API services
- PDF generation to be handled server-side
- Performance limitations based on chosen free-tier AI API
- Initial launch to support English language only

## **7. Dependencies**

- Access to a LaTeX compilation service
- Integration with an AI service API
- Web hosting service with backend processing capabilities
- PDF generation library

## **8. Success Metrics**

- User completion rate (% of users who successfully download a CV)
- Time to complete CV creation (target: under 15 minutes)

- User satisfaction rating (target: 4.5/5)
- Error rate in CV generation process (target: <5%)
- Number of returning users

## **9. Launch Criteria**

- Core features implemented and tested
- Error rate below threshold on test cases
- Load testing complete
- User acceptance testing with sample group successful
- Documentation complete