

WEEK 2: Deep Candidate Screening + Scoring Foundation



Days 1-2: Resume Parser + GitHub Link Extractor



Objectives

Develop a high-performance resume parsing system that extracts and structures candidate data with particular focus on technical profiles, GitHub repositories, and certification credentials.

Detailed Team Responsibilities



Fullstack Developers

- **Frontend (React/Next.js):**
 - **File Upload Component:**
 - Implement drag-and-drop zone with animated border feedback
 - Add file type validation for `.pdf`, `.docx`, `.doc` with custom error messages
 - Create size limit validation (max 10MB) with user-friendly alerts
 - Design progress tracking UI with percentage indicator and animated spinner
 - Implement error handling with retry functionality
 - Add preview capability for uploaded documents
 - **UI State Management:**
 - Set up Redux store with specific slices for upload status, parsing progress, and results
 - Implement optimistic UI updates with proper loading states
 - Create notification system for success/failure events

- **Backend (Node.js/Python - FastAPI):**
 - **API Endpoints:**
 - `/upload-resume:`
 - Multipart form data handler with stream processing
 - Virus scanning integration before storage
 - Generate unique file identifier with timestamp and user reference
 - `/parsing-status/:id:` Endpoint for checking parse status
 - `/parsed-results/:id:` Endpoint for retrieving parsing results
 - **Storage Configuration:**
 - Implement Google Cloud Storage with proper IAM role configuration
 - Set up file lifecycle policies (30-day retention)
 - Create fallback local storage for development environments

Database Schema Implementation:

```
{
  candidateId: ObjectId,
  name: String,
  email: String,
  phone: String,
  skills: [
    {
      name: String,
      yearsExperience: Number,
      context: String, // where in resume it was mentioned
      confidence: Number // NLP confidence score
    }
  ],
  github_links: [
    {
      url: String,
      username: String,
      repositoryCount: Number,
      profileCreatedAt: Date,
      extractedFrom: String // section of resume
    }
  ],
}
```

```
cert_links: [  
  {  
    platform: String, // "Coursera", "Udemy", etc.  
    url: String,  
    courseName: String,  
    issueDate: Date,  
    verificationStatus: String // "Pending", "Verified", "Failed"  
  }  
],  
leetcode_profile: String,  
linkedin_profile: String,  
resumeGCSLocation: String,  
originalFilename: String,  
processingStatus: String, // "Queued", "Processing", "Completed", "Failed"  
createdAt: Date,  
updatedAt: Date  
}
```

- **Queue System:**
 - Set up Google Cloud Pub/Sub for asynchronous processing
 - Implement job priority levels based on subscription tier
 - Create retry mechanism with exponential backoff (max 3 attempts)

AI/ML Engineers

- **Document Processing Pipeline:**
 - **PDF Processing:**
 - Implement PyMuPDF for text extraction with layout preservation
 - Add OCR capability (Tesseract) for scanned documents
 - Create section identification model (Education, Experience, Projects)
 - Build table/list detection for structured data extraction
 - **DOCX Processing:**
 - Use python-docx with custom parsers for maintaining structure
 - Extract embedded images and tables with structural context
 - Preserve formatting information for confidence scoring
 - **NLP Entity Extraction:**
 - Fine-tune spaCy model for technical resume terminology with custom entity types
 - Create skill taxonomy matcher with 5000+ technical skills and synonyms
 - Implement candidate name extraction with >95% accuracy using custom NER model
 - Design regex patterns for all common contact information formats
 - Create named entity linking for technologies to standardized terms
 - **Link Detection System:**
 - Implement regex patterns for all variations of GitHub URLs:
 - github.com/username
 - github.com/username/repository
 - www.github.com/username
 - <https://github.com/username>
 - Create verification system for GitHub usernames against API
 - Build context-aware link classification (project links vs. reference links)
 - Implement similar patterns for LeetCode, Coursera, LinkedIn, etc.

- **Edge Case Handling:**
 - Build handling for partially valid or broken links
 - Create recovery system for links in image-based resumes
 - Implement confidence scoring for ambiguous extractions
 - Design fallback extraction for non-standard resume formats
- **Metadata Enhancement Module:**
 - **GitHub Profile Enrichment:**
 - Implement GitHub API client with rate limit handling
 - Extract public profile statistics (stars, followers, repositories)
 - Create repository categorization by language and topic
 - Calculate activity metrics (commit frequency, recency)
 - **Context Analysis:**
 - Extract surrounding text context for links (50 chars before/after)
 - Identify claimed contribution levels through semantic analysis
 - Detect project ownership claims vs. contribution claims
 - Score relevance of repositories to claimed skills

Data Scientist

- **Schema Design & Optimization:**

GitHub Metrics Schema:

```
{
  repold: String,
  name: String,
  ownerUsername: String,
  candidateUsername: String,
  isOriginal: Boolean, // not a fork
  stars: Number,
  forks: Number,
  issues: Number,
  createdAt: Date,
  lastUpdated: Date,
  languages: [
    {
      name: String,
      bytesOfCode: Number,
      percentage: Number
    }
  ],
  testCoverage: Number,
  commitCount: Number,
```

```

candidateCommitCount: Number,
complexity: {
  cyclomaticMedian: Number,
  cyclomaticMax: Number,
  linesOfCode: Number,
  functionsCount: Number,
  classesCount: Number,
  fileCount: Number,
  documentationRatio: Number
}
}

```

LeetCode Performance Schema:

```

{
  username: String,
  profileUrl: String,
  problemsSolved: {
    easy: Number,
    medium: Number,
    hard: Number,
    total: Number
  },
  contestRating: Number,
  badges: [String],
  submissionStats: {
    acceptanceRate: Number,
    topLanguages: [
      {
        language: String,
        problemCount: Number
      }
    ]
  },
  recentActivity: {
    lastActive: Date,
    averageSolvePerWeek: Number
  }
}

```

Certification Schema:

```

{
  platform: String,
  courseName: String,
  courseUrl: String,
  issueDate: Date,

```

expiryDate: Date,
credentialId: String,
skills: [String],
verificationStatus: String,
credentialMatchScore: Number, // 0-1 score for name match
relevanceScore: Number // 0-1 score for relevance to job }

- **Preliminary Scoring Algorithms:**
 - Define normalization techniques for heterogeneous data sources
 - Create weighted scoring formulas with configurable parameters
 - Design confidence interval calculations for unreliable data points
 - Implement feature extraction pipelines for future ML scoring models

Day 1-2 Technical Implementation Details

1. **Development Environment Setup:**
 - Configure Docker containers for each microservice
 - Set up shared MongoDB Atlas cluster with separate collections
 - Create CI pipeline with GitHub Actions for automated testing
2. **GCP Infrastructure Preparation:**
 - Provision Google Cloud Storage bucket with proper CORS and security policies
 - Set up Cloud CDN for edge caching where appropriate
 - Configure monitoring with Cloud Monitoring and Cloud Logging
3. **API Contract Definition:**
 - Create OpenAPI/Swagger documentation for all endpoints
 - Define standard error responses and status codes
 - Implement rate limiting and security headers
4. **Integration Testing Strategy:**
 - Create test dataset with 50+ sample resumes of varying formats
 - Implement integration test suite with Jest and Supertest
 - Set up automated testing environment with mocked services

Day 1-2 Deliverables

- Functional file upload system with comprehensive validation
- Resume parser with >90% accuracy for standard formats
- Complete database schema implemented in MongoDB
- GitHub profile extraction with username verification
- Integration tests covering critical paths
- API documentation with Swagger/OpenAPI

Days 3-4: GitHub Code Analyzer + Certification Link Verifier

Detailed Technical Specifications

AI/ML Engineers

- **GitHub Repository Analysis System:**
 - **Repository Acquisition Pipeline:**
 - Create secure GitHub API client with OAuth integration
 - Implement repository cloning with depth limiting for large repos
 - Set up temporary storage with automatic cleanup
 - Add detection for private/invalid repositories with graceful handling
 - **Code Structure Analysis:**
 - Implement directory depth analyzer with statistics generation
 - Create language-specific parsers for popular languages:
 - Python: AST-based analysis with `ast` module
 - JavaScript: Esprima/Babel parser integration
 - Java: JavaParser implementation
 - Go: Custom parser for Go modules
 - Calculate directory structure complexity metrics:
 - Max/avg directory depth
 - File count distribution
 - Directory branching factor
 - **Code Quality Assessment:**
 - **Test Coverage Detection:**
 - Identify test files across frameworks:
 - Python: `test_*.py`, `*_test.py`, pytest fixtures
 - JavaScript: `*.test.js`, `*.spec.js`, Jest/Mocha patterns
 - Java: JUnit patterns, testNG patterns
 - Calculate test-to-production code ratio
 - Detect presence of CI configuration files (GitHub Actions, Jenkins, Travis)

- **Modularity Analysis:**
 - Compute average function size in lines/statements
 - Calculate function parameter counts and complexity
 - Measure class/file cohesion using semantic grouping
 - Generate dependency graphs for modules
 - **Complexity Metrics:**
 - Implement cyclomatic complexity calculator for all languages
 - Calculate Halstead metrics for volume/difficulty
 - Generate maintainability index scores
 - Create weighted aggregate quality score based on industry benchmarks
- **Code Originality Assessment:**
 - **Fingerprinting Algorithm:**
 - Generate normalized code fingerprints resistant to formatting changes
 - Create file-level hashes based on AST structure
 - Implement fuzzy matching for near-duplicate detection
 - **Repository Comparison:**
 - Build comparison database of popular public repositories
 - Implement locality-sensitive hashing for efficient comparison
 - Calculate originality score based on unique code percentage
- **Certification Verification System:**
 - **Platform-specific Crawlers:**
 - **Coursera:**
 - Implement headless browser automation with Playwright
 - Navigate certificate verification flows with multiple retry strategies
 - Extract certificate metadata with structured selectors
 - **Udemy:**
 - Create certificate URL parser for Udemy's verification system
 - Implement token extraction for certificate API access
 - Design fallback screen capture for direct verification
 - **AWS/Microsoft/Google Certifications:**
 - Build certificate ID extractors for standardized formats
 - Implement verification API clients where available
 - Create OCR-based extraction for image-only certificates
 - **Data Extraction Pipeline:**
 - Implement name extraction with normalization (handling prefixes, suffixes)
 - Create course title parser with standardization to master database
 - Extract date information with multiple format support
 - Capture certification level and specialization details

- **Verification Algorithms:**
 - **Name Matching:**
 - Implement Levenshtein distance calculator with configurable thresholds
 - Create name normalization (handling initials, order variations)
 - Design fuzzy name matching with confidence scoring
 - **Course Relevance Assessment:**
 - Build skill-to-course mapping database (10,000+ courses)
 - Implement embedding-based relevance scoring using sentence transformers
 - Calculate relevance score between certification and candidate's claimed skills

🔧 Fullstack Developers

- **GitHub Analysis UI Components:**
 - **Repository Overview Component:**
 - Create expandable repository cards with:
 - Repository name, description, stars, and fork count
 - Language breakdown with color-coded visualization
 - Last activity timestamp with relative time display
 - **Metrics Visualization:**
 - Implement complexity badge (A/B/C) with tooltip explanation
 - Create radar chart for code quality dimensions
 - Design progress bars for test coverage visualization
 - **Code Quality Tags:**
 - "Tested": Green checkmark for repositories with >20% test files
 - "Modular": Badge for code with good function/class distribution
 - "Original": Indicator for code with high originality score
 - "Active": Badge for repositories updated in last 3 months
 - **GitHub Profile Summary Component:**
 - Create contribution calendar visualization (similar to GitHub)
 - Implement language proficiency chart based on repository analysis
 - Design activity timeline with commit frequency visualization

- **Certification Verification UI:**
 - **Certificate Card Component:**
 - Create card layout with:
 - Platform logo with proper sizing and positioning
 - Course name with truncation handling for long titles
 - Issue date with proper formatting
 - Verification status badge with color coding
 - **Verification Status Indicators:**
 - "Verified": Green checkmark with tooltip showing match confidence
 - "Partial Match": Yellow warning with explanation (name or date mismatch)
 - "Not Verified": Red X with specific failure reason
 - "Pending": Gray clock icon for in-progress verification
 - **Detailed Certificate View:**
 - Expandable card with full certificate details
 - Skill tags extracted from course content
 - Platform credibility indicator

Data Scientist

- **GitHub Quality Score Algorithm:**
 - Define weighted formula:
 - Code Quality: 30%
 - Test coverage: 10%
 - Modularity: 10%
 - Complexity: 10%
 - Code Originality: 40%
 - Unique code percentage: 25%
 - Novel implementation approaches: 15%
 - Contribution Metrics: 30%
 - Commit frequency: 10%
 - Commit volume: 10%
 - Project longevity: 10%
 - Create adaptive weighting system based on:
 - Repository age and activity
 - Language and domain context
 - Repository size and complexity
 - Implement score normalization techniques:
 - Z-score normalization across candidate pool
 - Percentile ranking within domain groups
 - Min-max scaling with outlier handling

- **Certificate Scoring Algorithm:**
 - **Platform Credibility Weighting:**
 - Tier 1 (Highest): AWS, Google, Microsoft official certs
 - Tier 2: Coursera, edX, LinkedIn Learning
 - Tier 3: Udemy, Pluralsight, FreeCodeCamp
 - Tier 4: Lesser-known platforms
 - **Verification Confidence Impact:**
 - Perfect name match: 100% of available points
 - Partial name match: 50-90% based on similarity score
 - Failed verification: 0-10% based on cause
 - **Comprehensive Formula:**
 - $\text{Certificate Score} = \text{Platform Weight} * \text{Verification Confidence} * \text{Relevance Score} * \text{Recency Factor}$

Day 3-4 Integration Points

1. **Data Flow Architecture:**
 - GitHub analyzer receives repositories from resume parser
 - Certificate verifier receives URLs from resume parser
 - Score calculator receives inputs from both analyzers
2. **Shared Services:**
 - Implement shared logging service with structured JSON output
 - Create centralized error handling with categorization
 - Set up shared caching layer for API responses

Day 3-4 Deliverables

- Functional GitHub repository analyzer with language-specific parsing
- Comprehensive code quality assessment system
- Certificate verification system supporting major platforms
- UI components for displaying GitHub and certification data
- Initial scoring models with normalization techniques
- Integration tests for all components

Days 5-6: External Platform Integration (LeetCode, Figma, etc.)

Comprehensive Technical Specifications

AI/ML Engineers

- **LeetCode Profile Analyzer:**
 - **Data Acquisition:**
 - Implement web scraping with anti-detection measures
 - Create GraphQL client for LeetCode API (where applicable)
 - Build session management for authenticated scraping
 - Set up IP rotation for rate limit avoidance
 - **Profile Data Extraction:**
 - Extract problem-solving statistics with category breakdown
 - Capture contest history and rating progression
 - Calculate percentile ranking within LeetCode community
 - Retrieve recent activity patterns and solve streaks
 - **Problem Analysis:**
 - Categorize problems by difficulty and topic
 - Map problems to relevant technical skills
 - Calculate topic-specific proficiency scores
 - Analyze solution quality metrics where available
- **Design Platform Integration:**
 - **Figma Integration:**
 - Implement OAuth flow for Figma API access
 - Create project inventory extraction with metadata
 - Build component/style analysis for skill assessment
 - Implement interaction complexity analyzer
 - **Dribbble Portfolio Analyzer:**
 - Create public portfolio scraper with pagination handling
 - Extract project statistics (likes, views, comments)
 - Implement image analysis for style classification
 - Calculate engagement metrics and community standing
 - **Design Skill Assessment:**
 - Extract tags and categories from projects
 - Map tags to standardized design skill taxonomy
 - Implement frequency analysis for skill specialization
 - Calculate skill depth based on project complexity

- **LinkedIn Profile Analyzer:**
 - **Profile Data Extraction:**
 - Implement profile scraper with section detection
 - Extract work experience with duration calculation
 - Capture education history and credentials
 - Retrieve endorsements and skill validations
 - **Activity Analysis:**
 - Calculate post frequency and engagement metrics
 - Analyze content relevance to claimed expertise
 - Measure network size and quality
 - Assess profile completeness and professionalism
 - **Validation Algorithms:**
 - Cross-reference resume claims with LinkedIn data
 - Calculate consistency score between platforms
 - Flag discrepancies in employment history
 - Generate trust score based on profile verification

🔧 Fullstack Developers

- **Platform-Specific UI Components:**
 - **LeetCode Profile Section:**
 - Create problem-solving statistics card with:
 - Donut chart for problem difficulty distribution
 - Line chart for solving progress over time
 - Badge showcase with tooltip explanations
 - Contest rating with percentile indicator
 - **Topic Proficiency Visualization:**
 - Radar chart for algorithm category strengths
 - Progress bars for language-specific problem counts
 - Visual indicator for highest difficulty solved
 - **Design Platform Showcase:**
 - **Figma/Dribbble Gallery:**
 - Masonry layout for project thumbnails
 - Hover states with engagement statistics
 - Modal for detailed project view
 - Tag cloud for design specialization
 - **Metrics Dashboard:**
 - Engagement statistics with benchmark comparisons
 - Community standing visualization
 - Growth chart for account activity

- **LinkedIn Integration UI:**
 - Profile summary card with verification status
 - Experience timeline with position details
 - Endorsement visualization with skill breakdown
 - Network quality indicator with industry benchmarks
- **Platform Status Indicators:**
 - Create unified status badge system:
 - "Not Found": Gray icon with tooltip for missing profiles
 - "Private Profile": Lock icon for inaccessible data
 - "Limited Access": Partial data indicator
 - "Verified": Green checkmark for complete access
 - **Score Visualization:**
 - Implement circular progress indicators for platform scores
 - Create comparative bar charts across platforms
 - Design detailed score breakdown panels
 - Add peer comparison visualizations where relevant

Data Scientist

- **Multi-Source Scoring Engine:**
 - **Technical Skill Score:**
 - Formula: $\text{Tech Score} = (\text{GitHub } 50\%) + (\text{LeetCode } 50\%)$
 - GitHub components:
 - Code quality: 20%
 - Project relevance: 15%
 - Contribution history: 15%
 - LeetCode components:
 - Problem difficulty distribution: 20%
 - Topic coverage: 15%
 - Contest performance: 15%
 - **Creative Skill Score:**
 - Formula: $\text{Creative Score} = (\text{Figma } 60\%) + (\text{Dribbble } 40\%)$
 - Figma components:
 - Design complexity: 20%
 - Component structure: 20%
 - Interaction design: 20%
 - Dribbble components:
 - Visual appeal: 15%
 - Community engagement: 10%
 - Portfolio diversity: 15%

- **Professional Presence Score:**
 - Formula: $\text{Social Score} = \text{LinkedIn Activity} + \text{Profile completeness}$
 - Activity components:
 - Post frequency: 15%
 - Engagement metrics: 15%
 - Relevance to expertise: 20%
 - Profile components:
 - Completeness: 15%
 - Recommendation quality: 15%
 - Network relevance: 20%
- **Normalization Pipeline:**
 - Implement min-max scaling for each score category
 - Create percentile ranking system across candidate pool
 - Design outlier detection and handling
 - Calculate confidence intervals for each score

Day 5-6 Integration Requirements

1. Authentication Management:

- Implement secure credential storage for API access
- Create rate limiting and backoff strategies
- Design error recovery with alternative data sources

2. Data Consistency Enforcement:

- Create unified candidate profile from multiple sources
- Implement conflict resolution for contradictory data
- Design data freshness tracking and update triggers

Day 5-6 Deliverables

- Functional platform-specific crawlers for all targeted sites
- Comprehensive UI components for displaying platform data
- Multi-dimensional scoring engine with normalized outputs
- Advanced analytics framework for candidate evaluation
- Integration tests for data flow across components
- Privacy-compliant data handling system

Day 7: Candidate Scoring & Leaderboard MVP

Comprehensive Technical Blueprint

AI/ML Engineers + Data Scientist

- **Aggregate Scoring Pipeline Architecture:**
 - **Data Integration Layer:**
 - Create unified candidate profile from all sources
 - Implement data quality assessment with completeness metrics
 - Design conflict resolution strategies with source priority hierarchy
 - **Feature Engineering Framework:**
 - Implement domain-specific feature extractors
 - Create cross-platform correlation features
 - Design temporal feature extraction for activity recency
 - **Comprehensive Scoring System:**
 - **Primary Score Components:**
 - Technical Ability: 40%
 - Code quality (GitHub): 15%
 - Problem-solving (LeetCode): 15%
 - Technical breadth: 10%
 - Verification Confidence: 30%
 - Identity consistency: 10%
 - Claim verification: 10%
 - Experience validation: 10%
 - Platform-specific Excellence: 30%
 - GitHub quality metrics: 10%
 - Certification portfolio: 10%
 - Design/creative indicators: 10%
 - **Secondary Adjustment Factors:**
 - Activity recency multiplier: 0.8-1.2
 - Profile completeness bonus: 0-10%
 - Inconsistency penalty: 0-20%
 - **Output Generation:**
 - Create standardized candidate profile with detailed scoring breakdown
 - Generate detailed reports highlighting strengths and improvement areas

Fullstack Developers

- **Advanced Leaderboard UI System:**
 - **Candidate Card Component:**
 - Create responsive card layout with candidate info and score visualization
 - Implement platform badges with verification status
 - Add quick action buttons (view profile, save, flag)
 - **Filtering and Search System:**
 - Implement advanced filtering by role, tech stack, score threshold
 - Build full-text search across candidate data
 - Create typeahead suggestions based on available candidates
 - **Sorting and Organization:**
 - Create flexible sorting options by various score components
 - Implement grouping capabilities by skill cluster and experience level
 - **Pagination and Performance:**
 - Implement virtual scrolling for large candidate pools
 - Create server-side pagination with customizable page size
 - Design skeleton loaders for improved UX during data fetching
- **Detailed Candidate Profile:**
 - **Profile Overview Section:**
 - Create comprehensive candidate summary with contact info and skills
 - Build score dashboard with interactive charts
 - **Platform Data Integration:**
 - Implement tabbed interface for platform-specific data
 - Create expandable evidence panels for claims

🌫 DevOps Engineer (GCP Focus)

- **Infrastructure Architecture:**

- **Containerization Strategy:**
 - Create Docker images for each microservice
 - Configure Google Kubernetes Engine for production deployment
- **Scaling Configuration:**
 - Design horizontal scaling policies based on queue length
 - Implement caching strategies using Memorystore
 - Configure resource limits for all containers
- **Network Security:**
 - Set up VPC Service Controls for secure communication
 - Implement IAM policies for service authentication
 - Configure Cloud Armor for public-facing components

- **Monitoring Framework:**

- Implement comprehensive logging with structured format
- Create custom metrics for pipeline performance
- Design alerting system with severity levels
- Set up Cloud Monitoring dashboards for key metrics

- **API Gateway Configuration:**

- Create unified API gateway using Cloud Endpoints
- Generate API documentation with OpenAPI/Swagger
- Implement authentication and authorization

Day 7 Deliverables

- Fully operational scoring pipeline with component weights
- Interactive leaderboard with filtering and pagination
- Comprehensive API documentation with examples
- Monitoring and alerting system for operational issues
- Integration test suite covering end-to-end flows

CRITICAL COLLABORATION MANDATE

ATTENTION ALL TEAM MEMBERS: Week 2 development establishes our core product functionality and is CRITICAL to project success. The following collaboration requirements are NON-NEGOTIABLE:

Communication Protocol

- **Continuous Presence:** All team members must be communicating and collaborating
- **Status Updates:** Post component status updates every day
- **Stand-ups:** Mandatory 15 to 30-minute stand-ups at discord with NO EXCEPTIONS

Cross-Team Integration Requirements

- **Frontend + Backend:** API contract must be finalized by Day 1 EOD with mock endpoints deployed
- **AI/ML + Data Science:** Model interfaces must be defined by end of Day 2 with test harnesses
- **All Teams:** Integration testing sessions required at 4 PM daily

Code Quality Gates

- **Pre-commit Testing:** All commits must pass automated tests before PR submission
- **Code Reviews:** Maximum 4-hour turnaround for all PRs with at least two reviewers from different teams
- **Test Coverage:** Minimum 80% code coverage for new features, 70% for bugfixes

Dependency Management

- **Frontend Dependencies:** Must clear packages with DevOps before installation
- **Backend Services:** Any new service must be containerized immediately
- **Third-party APIs:** All external service integration requires fallback implementation

Week 2 Success Criteria

1. **Resume Parser Accuracy:**
 - 85% accuracy in extracting GitHub links
 - 90% accuracy in identifying candidate name and contact info
 - Processing time <30 seconds per document
2. **GitHub Analysis Quality:**
 - Code quality metrics align with manual assessment in >80% of cases
 - Repository fetching success rate >95% for public repositories
 - Language detection accuracy >90%
3. **Certification Verification Performance:**
 - 80% success rate in accessing certification platforms
 - 90% accuracy in extracting certificate metadata
 - Name matching achieves >85% accuracy including partial matches
4. **External Platform Integration:**
 - Successful data retrieval from at least 3 platforms (LeetCode, LinkedIn, Figma/Dribbble)
 - 90% profile match rate when correct username is provided
 - Graceful handling of private profiles and rate limits
5. **Scoring System Reliability:**
 - Score calculation completes in <5 seconds per candidate
 - Consistent results with <5% variation on repeated scoring
 - Score components demonstrably correlate with manual assessment
6. **Overall System Performance:**
 - End-to-end processing (upload to leaderboard) <3 minutes per candidate
 - API endpoints maintain <200ms response time under load
 - System handles 50+ concurrent users without degradation