Software Engineering Final Project

AIcademia

Academic Paper Management System

“Revolutionizing Academic Publishing Through AI”

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Software Engineering Final Project

OVERVIEW

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INTRODUCTION

Our system (AIcademia) automates and streamlines the workflow of research paper submission, review, and status tracking within academic institutions.

- Replaces manual, paper-based processes
- Centralizes, web-based platform
- Enhances efficiency, transparency, and collaboration

PROBLEM STATEMENT

- Paper or email-based submissions
- Manual document storage and organization
- Offline review coordination
- Delays and errors in status updates

Impact :

Inefficiencies, lack of real-time tracking, and increased administrative overhead.

OBJECTIVES

- Develop a user-friendly, web-based system
- Automate metadata extraction and handling
- Provide role-based access for users
- Automate review assignments and feedback
- Offer real-time dashboards and reports
- Implement notification mechanisms

Project Scope

- **Initial Features**
  - Researcher registration and login
  - Paper submission (PDF/DOCX)
  - Metadata extraction and correction
  - Admin dashboard for monitoring
  - Reviewer assignment and feedback
  - Status tracking
  - Report export
- **Future Enhancements**
  - Plagiarism detection integration
  - Enhanced analytics
  - Broader notification channels

SIGNIFICANCE

Key Benefits:

- Reduces administrative burden
- Increases processing speed and accuracy
- Enhances transparency for researchers
- Strengthens security and auditability
- Provides data-driven insights

Digitized

Workflow

USER PROFILES

- **Researchers:** Submit and manage papers
- **Admins:** Workflow management
- **Students:** Discover and organize papers

FEATURES & BENEFITS

- **Efficient Workflow:** Streamlined submission and review
- **Role-Based Access:** Secure access for researchers, reviewers, admins
- **Real-Time Monitoring:** Live dashboards for system activity
- **Automated Notifications:** Instant updates on submission status
- **Audit Logs:** Track security events
- **Report Generation:** Exportable analytics
- **Digital Storage:** Minimizes physical storage needs

PROCESS MODEL & SCHEDULE

- **Incremental Development Model**
- **Modules delivered in phases**
- **Phases:**

  Identification → Design → Implementation → Testing → Feedback

SYSTEM ARCHITECTURE (3-TIER)

- **Presentation:** React.js + Bootstrap
- **Application:** Flask/Django (Python)
- **Data Layer:** PostgreSQL/MongoDB + AI modules

Hardware & Software Requirements

Hardware:

Item	Specification	Quantity
Server	2 GHz Processor, 256 MB RAM, 80 GB HDD	1
Clients	1.7 GHz Processor, 128 MB RAM, 40 GB HDD	3
LAN	10/100 Mbps	1
Printer	Laser printer	1

Software:

- **Server:** Windows 2000, Microsoft SQL Server 2000, Java 2 SDK
- **Client:** Windows XP, Microsoft Office 2003, SDK/JDK

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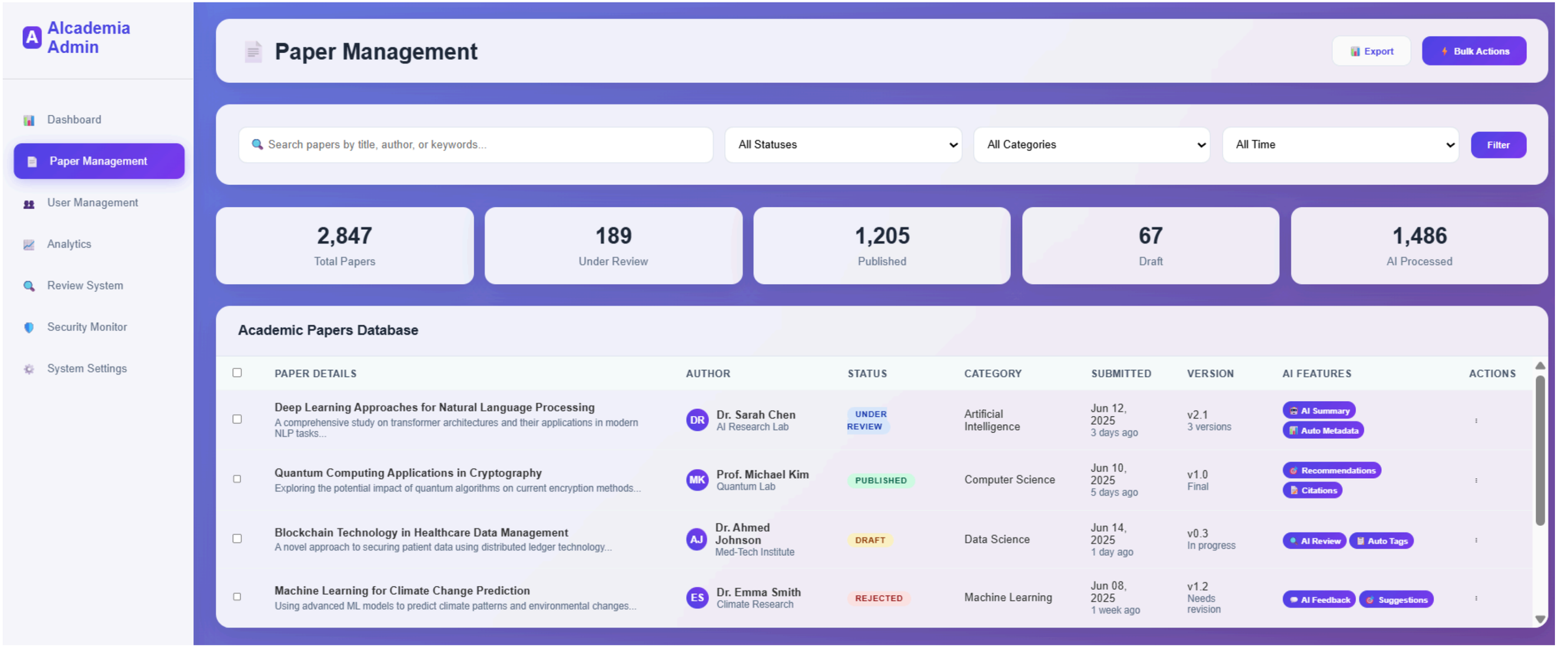

EXPECTED OUTCOMES

- Seamless electronic submission and review
- Improved communication and transparency
- Minimized manual errors and delays
- Scalable platform for growing submissions
- Foundation for future enhancements

Impact :

A robust, user-friendly platform transforming academic paper management.

CONCLUSION

- AIcademia = Smart Academic Ecosystem
- Secure, scalable, and efficient
- Supports future AI integrations and global research access

Ready to transform academic research management!

THANK YOU

FOR THE ATTENTION

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