

# Kevin A. Pepín

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## EDUCATION

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### Williams College

Williamstown, MA

Bachelor's in Computer Science (GPA: 3.74)

Graduation Date: June 2025

- **Scholarships:** Kippy Liddle '82 Scholarship, Class of 1981 Scholarship, Garrett Thornburg '68 Scholarship, Class of 1976 Scholarship
- **Awards:** Dean's List, Ward Prize Nominee, Oliver Scholar, All Star Code Cohort 2019, Class Toaster

## EXPERIENCE

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### Software Development Engineer Intern

New York, NY

Amazon

June 2024 - August 2024

- Engineered a product page simulator using Python-based AWS Lambdas and Streamlit, enabling real-time experimental edits to AI-generated attribute labels, values, and groupings
- Built a search simulation tool leveraging LLMs and AWS Elasticsearch to validate AI-generated attributes and semantic analysis across 6,000+ products
- Partnered with ontologists and AI teams to iterate on design, enhancing AI model evaluation and product discoverability while streamlining validation workflows to reduce reliance on post-deployment testing and improve metadata accuracy by 15%

### Software Development Engineer Intern

New York, NY

Amazon

June 2023 - August 2023

- Collaborated with machine learning scientists and engineers to design data schemas and user interfaces, streamlining machine learning development processes and reducing iteration time for 20+ stakeholders
- Developed and integrated Python software with Pandas and NumPy to generate approved schemas and interfaces, enhancing data processing efficiency and seamlessly incorporating them into existing systems
- Improved operational reliability and model predictability by leveraging AWS SageMaker, AWS S3, and Docker for testing and deployment, then modified existing Java systems to support new schema attributes and accelerate machine learning development by 10%

## PROJECTS

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### Peer to Peer Textbook Sharing for Williams College Distributed Systems Class

December 2024

- Created a decentralized peer-to-peer marketplace for used books, leveraging a centralized Napster-style index for efficient book discovery and direct buyer-seller transactions
- Designed a system architecture with a centralized directory server for metadata management and peer nodes for direct communication, enhancing book availability and reducing resale fees

### Virtual Memory Manager for Williams College Operating Systems Class

November 2023

- Implemented an external pager for virtual memory management, handling address space creation, read/write faults, and address space destruction while managing simulated physical memory and disk resources for efficient multi-application support
- Enhanced virtual memory functionality by implementing system calls (vm\_extend and vm\_syslog) to enable dynamic virtual page allocation and logging operations, optimizing memory utilization and system efficiency

## OTHER SKILLS AND INTERESTS

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**Programming:** Python, C/C++, Java, JavaScript, HTML, CSS

**Languages:** Fluent in Spanish, intermediate Mandarin

**Interests:** Horology, Music, Fashion, Motorsports, Basketball