# Shriyan Yamali

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## Education

**Newark Charter High School** Sept 2023 – May 2027
*GPA: 4.0/4.0* *Newark, DE*

- **Activities:** Business Professionals of America President, Computer Science Honor Society President, Mock Trial.
- **Honors:** Gold Level President's Volunteer Service Award, Distinguished Honor Roll, AP Scholar with Distinction.

## Experience

**University of Michigan FP Lab** June 2025 – Present
*Lab Member* *Remote*

- Contributing to PhD level reserach on type theory at the Future of Programming Lab under Professor Omar.
- Developing Hazel, a live functional programming environment in `Reason` that supports editing, evaluating, and type-checking programs with typed holes, leaving no meaningless editor states.

**Stanford Law School** June 2024 – Present
*Programming Intern* *Remote*

- Developed a four-phase Python pipeline using `Pandas`, `PyPDF2`, and `Regex` that scrapes the European Commission's Competition Case Search, downloads decision PDFs, and converts them into a text corpus.
- Batched the corpus through Google Gemini, via the `GenAI` API, to automatically isolate every relevant market definition and consolidate them into a database of 600 unique cases, used to evaluate monopolistic behavior.
- Building JurisMercatus, a website with 4000+ market definitions, made with `Next.js`, `TypeScript`, and `Tailwind CSS`, that performs semantic searches, using `OpenAI` embeddings and the `Pinecone` API for vector indexing.
- *Project Link:* jurismercatus.shriyanyamali.com

**Dartmouth College** July 2024 – Jan 2025
*Assistant Editor* *Remote*

- Proofread an ICLR submission through two revision cycles, ensuring all 31 pages met the conference formatting rules, were grammatically sound, and maintained consistent terminology, notations, and citations throughout.
- Built 2 `LaTeX` tables that distilled 100,000 pairwise evaluation instances from 12 judge LLMs (GPT, Claude, Gemini families) and 40 candidate models into the core metrics: repetition stability, position consistency, and preference fairness.

**University of Pennsylvania Carey Law School** July 2024 – Aug 2024
*Summer Intern* *Philadelphia, PA*

- Built LexFlow, a Python tool that generates T-shaped graphical models showing how legal principles exert force on an act type based on user-defined attributes, used in research, legal articles, and policy evaluation.
- Engineered a system where user inputs are converted into arrows with width, length, and area calculated using weighted geometric formulas, which were later purchased by the University of Pennsylvania Carey Law School.
- Used `Matplotlib` for diagram rendering, `NumPy` for numerical computation, and implemented vertical positioning algorithms and force-balancing mechanics to ensure accurate vector graphic placement.
- *GitHub Repository Link:* shriyanyamali/LexFlow

## Publications

S. Yamali. "Lextract: A Python Pipeline for the Automated Extraction of Market Definitions". *Journal of Open Source Software, Forthcoming*, 2025, http://dx.doi.org/10.2139/ssrn.5576990.

S. Yamali. "Disentangling *Citizens United* and *SpeechNow.org*: Independent Expenditures and the Rise of Super PACs". *Working Paper*, 2025.

## Awards

**First Place in Computer Programming Concepts** (Business Professionals of America NLC, 2025)
Placed 1st out of 7,450+ participants nationwide in an exam testing algorithms, Python, Java, JavaScript, web development, SQL, version control, programming paradigms, debugging, testing, and logic-based problem solving.

**First Place in Information Technology Concepts** (Business Professionals of America NLC, 2025)
Placed 1st out of 7,000+ participants nationwide in an exam testing IP, DNS, ports, firewalls, cybersecurity, hardware and software, cloud computing, data and information processing, storage systems, system architecture, and digital ethics.