# Nithin Venkatramanan

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## Education

**Brown University** — Providence, RI
*Bachelor of Arts, Computational Biology & Economics* — *2026 – 2030*
**Activities:** Brown Healthcare Investment Group, Brown Initiative for Policy, Brown Political Union

**Nashua High School North** — Nashua, NH
*GPA: 4.0 UW/4.98 W | SAT: 1560/1600 | PSAT/NMSQT: 1520/1520* — *2022 – 2026*

## Research

**Health Policy & Economics Researcher** — 2026 – Present
*CAHPR @ Brown University School of Public Health, Joint w/ Harvard Kennedy School* — *Providence, RI*

- Python FDA Orange Book platform parsing historical annual editions/supplements since 1980; linked patents, exclusivities, orphan-drug indications, product removals, and formulation differences
- Policy/economic analysis of generic competition, market entry, drug availability, and federal pharmaceutical incentives

**Clinical & Computational Nephrology Researcher** — Sep. 2025 – Present
*Ishibe Lab, Yale School of Medicine* — *New Haven, CT*

- Xenium spatial transcriptomic analysis of FSGS tissue microarrays; cell-type–resolved profiling of podocyte injury and proteinuric kidney disease
- R/Python pipeline integrating Xenium spatial transcriptomics across 3 FSGS disease groups; automated cell-to-sample mapping, QC, clustering, podocyte-specific analysis

**Computational Biology Researcher** — May 2025 – Apr. 2026
*Mattoo Lab, Purdue University* — *West Lafayette, IN*

- R pipeline stratifying genes by protein turnover and expression dynamics across time-resolved datasets
- Gene ontology/pathway enrichment linking transcriptional and post-transcriptional behavior to cellular function

**Computational Biochemistry Researcher** — Apr. 2025 – Feb. 2026
*Fiehn Lab & West Coast Metabolomics Center, University of California, Davis* — *Davis, CA*

- Python backend dev. for MassCube/MassWiki (LC-MS/MS workflows) and large-scale metabolite annotation
- Probabilistic spectral matching with m/z and retention-time error modeling across heterogeneous datasets

## Experience

**Biomedical Research & Development Intern** — Jun. 2024 – Aug. 2024
*MarvelBiome, Inc. (biomedical technology series-C startup)*

- Western blots, mammalian cell culture, passaging, iPSC differentiation, and 3D neuronal cultures for novel Alzheimer's therapeutic development

**Chief Policy & Financial Officer** — Jun. 2025 – Present
*EconEd (501(c)(3) Financial Literacy Nonprofit Organization)*

- Led advocacy for successful statewide financial-education mandate at New Hampshire State House
- Healthcare-finance curriculum reaching 2,000+ students across 64 chapters; $25,000 raised; recognized by Nashua Mayor Jim Donchess, NH Governor Kelly Ayotte, Princeton Prize in Race Relations committee

**Vice Chair** — Aug. 2022 – Present
*High School Democrats of America, Nashua Branch* — *Nashua, NH*

- 5 voter-registration drives registering 1,000+ residents; 3 bipartisan town halls with 100+ attendees each
- Coordinated voter outreach and canvassing for municipal and local elections

## Technical Skills

**Programming:** Python, R, Java | **Software:** Excel, Word, PowerPoint | **Languages:** English, Tamil, Spanish