

ISHAAN SAMANTRAY

Potomac, MD | 240-401-2839 | is455@cornell.edu | www.linkedin.com/in/ishaan-samantray1/

EDUCATION

Cornell University, College Of Agricultural and Life Sciences & College Of Engineering **Ithaca, NY**
Bachelor of Science in Biological Engineering *Expected Graduation: May 2029*
Minor: Business & Computer Science *GPA: 3.53*

Winston Churchill High School **Potomac, MD**
High School Diploma *Graduation: May 2025*

PROFESSIONAL EXPERIENCE

National Institute Of Health - National Eye Institute **Bethesda, MD**
Research Intern *Dec 2023 - May 2025*

- Conducted wet-lab research on age-related macular degeneration under Bharti lab with Dr.Sharma at the National Eye Institute
- Performed Western blotting, image segmentation, and independent retinal pigment epithelium (RPE) cell culture maintenance
- Contributed coding and imaging analysis to the AI software LipidUNet for retinal disease research (publication forthcoming)

Astrazeneca **Gaithersburg, MD**
Business Development Intern *June 2024 - August 2024*

- Job shadowed wet-lab research, clinical operations, and business development teams across the drug development lifecycle
- Observed pharmaceutical R&D strategy, pipeline progression, and cross-functional collaboration in an industry setting
- Gained exposure to decision-making processes in commercial, clinical, and research project pipelines across functions

Sanaria Inc. **Rockville, MD**
Research Intern *August 2023 - May 2024*

- Conducted genetic mapping of *Anopheles* mosquito lines for PfSPZ malaria vaccine development and experimental validation
- Developed PCR genotyping assays using Splinkerette PCR and sequencing to identify and characterize transgenic mosquito lines
- Co-authored a peer-reviewed publication ([PMID: 40321780](#)) & Won 1st Place in Biology Category at Montgomery Science Fair

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

Impact Investing at Cornell **Ithaca, NY**
Analyst, Associate Development Program *February 2026 - Present*

- Analyze companies through structured case work using valuation models, financial statement analysis, and industry research
- Developing DCF modeling and sustainable finance knowledge, training toward work with Mirova Global Asset Management
- Leading advertising for new member fundraising initiatives to support the club's capital base and strengthen engagement

Medimint **Washington, D.C.**
Business Analyst & Software Engineering Intern *December 2025 - Present*

- Built front-end for incident report software and Jira integration; developed an API for identity verification system utilizing SSN
- Created value propositions, identified key contacts, and developed outreach strategies leading to a MedStar Health pilot deal
- Supported closure of an 8 million dollar contract with University of Pennsylvania Medicine, expanding MediMint's work

AguaClara - Richardson Lab of Applied Microbiology **Ithaca, NY**
Project Team Member *Nov 2025 - Present*

- Member of the UASB subteam developing gravity-powered anaerobic sludge blanket reactors for at-home wastewater treatment
- Designing a pilot-scale pressurized gas collection chamber instrumented with ProCoDA pressure sensors to quantify biogas output
- Leading fabrication of a pilot-scale UASB reactor for local community deployment in Puerto Rico & Honduras in Winter 2026

Spidersmart **Rockville, MD**
Assistant Manager & Tutor *July 2021 - January 2026*

- Tutored and mentored 175+ students (K-10) in SAT/ACT prep, math, reading, history, writing, debate, and biology coursework
- Designed customized instruction and targeted assignments to strengthen core academic skills and critical thinking abilities
- Supported daily operations by digitizing and managing invoices, payments, materials, and student scheduling and record systems

Kids For Code **Potomac, MD**
Co-Founder & Co-President *Sep 2021 - June 2025*

- Led a global student-run nonprofit, managing 100+ instructors and overseeing curriculum, operations, and program growth
- Expanded programs to 10,000+ students across 37 states and 11 countries through outreach, adverts, and strategic partnerships
- Directed advertising and growth initiatives, generating 10,000+ registrations, 1.43k subscribers, and 97k+ YouTube views total

SKILLS & INTERESTS

Skills: Python, Java, JavaScript, C++, HTML/CSS, Next.js, FastAPI, Redis, MongoDB, Node.js, REST APIs, CAD, Microsoft Excel, Financial Modeling, Western Blotting, PCR, Data Analysis, ChimeraX, ProCoDA, HubSpot CRM, Spanish

Interests: Tennis, Skiing, Boxing, Swimming, Traveling, Restaurant Hopping, Urban Explorer, Modern Family (Hulu Show)