

Ashna Ramaswamy

Philadelphia, PA 19103 ashnar@seas.upenn.edu • (973) 382-6515 • [linkedin.com/in/ashnaramaswamy](https://www.linkedin.com/in/ashnaramaswamy)

EDUCATION

University of Pennsylvania, School of Engineering and Applied Science | Philadelphia, PA
Candidate for Master of Science in Engineering: Bioengineering
Cumulative GPA: 3.33/4.00

May 2025

Boston College, Morrissey College of Arts & Science | Chestnut Hill, MA
Bachelor of Science in Biology: Cell & Molecular Biology, Minor in Computer Science

May 2023

SKILLS

Laboratory: iPSC Culture and Maintenance, Mammalian Cell Culture, Immunohistochemistry, cDNA Synthesis, Agarose Gel Electrophoresis, PCR and RT-PCR, Restriction Enzyme Digestion, ELISA, Plasmid Amplification, Microscopy
Computer: Python, Java, R, HTML, CSS, JavaScript, SQL, Data Analysis, Microsoft Office (Excel, Word, PowerPoint, Access, Outlook)

COURSEWORK

Biology: Developmental Biology, Tissue Engineering, Investigations in Cellular Reprogramming Lab, Investigations in Molecular Cell Biology Lab, Cancer Biology, Inflammation & Disease, Introduction to Genomics, Genetics, Biochemistry
Computer Science: Introduction to Data Science, Machine Learning in Economics, Introduction to Visualization
Math: Foundations of Engineering Mathematics I, Statistics, Linear Algebra

PROFESSIONAL EXPERIENCE

Novo Nordisk | Intern, Student Assistant | Princeton, NJ

June 2022 – November 2022

- Ideated, researched, and incubated ideas for novel technologies for applications to various target markets, such as individuals afflicted by vision or motor deficiencies.
- Analyzed national patient datasets containing 17+ million data points related to obesity using SQL, and delivered insights to team in Biweekly Sprint Reviews to develop ideas for innovative tools for patients and HCPs.
- Contacted internal stakeholders for HCP-level and patient-level datasets, and compiled and rendered datasets to team.
- Conducted comprehensive stakeholder interviews to develop Best Practice Guidelines, Meeting Minutes, and Commitment Letter templates for academic partnerships, resulting in efficient communication and standardized processes across the organization, saving time and enhancing collaboration.
- Streamlined transition from Microsoft Teams to Smartsheet by developing guides and providing tutorials to 20+ team members.
- Maintained and coordinated data entries in Smartsheet for 2 teams to track productivity and project progress.
- Led and scheduled meetings for 10+ team members alongside senior managers to support productivity.

John Muir Health | Volunteer | Walnut Creek, CA

June 2018 – July 2019

- Supervised 15+ patients per shift in different departments and liaised with physicians and nurses to ensure quality of care.
- Compiled, organized, and documented patient data to enter into patient charts.
- Managed patient diets, delivered patient samples, restocked supplies, and cataloged appointments.

PROJECTS

SOX2 in TNBC CSCs | Chestnut Hill, MA

August 2022 – December 2022

- Developed independent creative project proposal for the investigation of SOX2 as a potential pluripotency factor for cancer stem cell development in Triple-Negative Breast Cancer tumors.
- Presented proposal in Investigations in Cellular Reprogramming course.

EEG Patterns and Fear Response, Team of 2 | The Athenian School | Danville, CA

January 2016 – June 2019

- Researched the connection between electrochemical wave patterns in the brain and the involuntary fear response.
- Collaborated with health professionals, designed experiments, and analyzed data to learn about the brain.
- Assembled and experimented with an OpenBCI EEG by 3D printing the scaffold and assembling the electrodes.
- Developed a business proposal for a cloud-based software application that can process and analyze EEG brainwave data using machine learning algorithms to assess if a patient has autism.
- Pitched idea and shared research with a panel of industry experts through presentations and posters.
- Awarded first place in the semi-finalist round of a regional entrepreneurship competition in Northern California.

LEADERSHIP

Media Chair & Choreographer | Masti | Chestnut Hill, MA

September 2019 – May 2023

- Planned, publicized, and held auditions to recruit team of 20+ dancers for a South Asian dance team, and choreographed 10+ dances for college events and college-wide competitions.