Ashna Nirula



EDUCATION

Milliken Mills High School Markham, ON Expected IB Diploma 2021-2025

EXPERIENCE

Scientific Writer Sep 2024-Feb 2025

Trove Biosciences Toronto, ON

With Dr Tarika, writing a technical scientific article about opportunities in CRISPR agricultural products

Data Contributor May 2024-July 2024

PhageBase Stanford University

Contributed to the largest database of phage electron micrographs, synthesizing 50+ scientific papers of bacteriophage research

SKILLS

Hard Skills: Python, HTML/CSS, Figma,

CAD, Benchling

Soft Skills: Technical writing,

Communication

Interests: Sustainable design, Systems

engineering, Climatetech, math

MEDIA

Spoken about foodtech & sustainability:

- → <u>a panel</u> at the Change Leadership Conference in May 2023
- → MC of the Planet Tech stage at WebSummit, the world's largest tech conference in November 2022
- → Future of the Climate Panel at Microsoft HQ with The Knowledge Society (TKS) in June 2022

PROJECTS

Yeast Plasmid Design - making milk without the cow | <u>Article</u> Jan 2024-Mar 2024

I replicated a plasmid DNA design that allows yeast cells to biomanufacture milk proteins without a cow alongside a research article about its system design

TheMondayMag.Com - celebrating everyday mundane magic | Website August 2024

TheMondayMag is a seasonal mixed media magazine celebrating the magic in the everyday mundane rather than curated cultivated fragments of real experience.

Project Manager - CAE Consulting Challenge | Deck March 2022

As Project manager for a month-long sprint with Canadian Aviation Electronics (CAE) at The Knowledge Society, I led a team in a community consulting project to diversify the largest global pilot training company with digital twin technology.

Computer Vision TensorFlow Model - detecting crop disease | <u>Github</u> December 2021

Because of the significant economic loss of agricultural diseases, I built a CNN to classify images using drone data of late-blight affected plants with a detection accuracy of 93%.

Underwater Farming prototype - a new food method | <u>Video</u> April 2021

A replica of Nemo's Garden, the world's first underwater farm, I designed a prototype to grow food underwater more sustainably using hydroponics and hardware in my fish tank.