

Raghav Sriram

Student, Leader, Researcher, Innovator, Full-Stack Developer

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EXPERIENCE

NexEdge Innovations, Carmel IN — CEO

June, 2020 - PRESENT

Founder of NexEdge Innovations, a multinational conglomerate company promoting fundamental skills in education and views on global issues.

Kihara Bioinformatics Laboratory, Purdue University - Researcher

January, 2021- PRESENT

Currently Researching the Nattokinase-aided Staphylococcus aureus biofilm dispersion pathway alongside Graduate Students.

ScioVirtual, Nationwide — Head of Programming Courses and Water Quality Teacher

December, 2020 - PRESENT

ScioVirtual is a nonprofit organization that provides quality virtual science courses. I am in charge of the Computer Science suite of courses offered by ScioVirtual and teach the Aquatic Ecology course as well.

AiGoLearning, Nationwide — Developer

November, 2020 - PRESENT

Nonprofit teens teach kids organization dedicated to educating students on programming, artificial intelligence, and its applications. I am a lead developer as well as a machine learning and Java instructor.

ORGANIZATIONS

AcademiaEdge, Carmel IN — Founder

November 2020 - Present

Nonprofit Organization aimed to teach students programming and problem-solving skills by providing free programming courses.

Voices of Carmel — Founder

July 2020 - Present

A nonprofit organization for the city of Carmel. We provide volunteering

SKILLS

Business Management
Research
Leadership
Web Development
Adobe InDesign
Premiere Pro
Photoshop
Mentorship
Innovation
HTML/CSS
JavaScript
React.js
Python
Java
Competitive Programming
Machine Learning/Artificial Intelligence
Computational Biology
Bioinformatics
Structural Biology
Computational Chemistry
Earth Science
Mineralogy
Juggling

opportunities and a safe space for Carmel Citizens to voice their opinions.

HiLite— Reporter and Copy Editor

August 2019 - Present

The HiLite is Carmel High School's Monthly News Magazine. For my second year, I am a Feature Reporter and Cover Copy Editor. Through HiLite I have learned the fundamentals of journalism and graphic design. Next school year I will be the News Editor.

Hack Indiana— Co-Founder

November 2020 - Present

I am the co-founder of Hack Indiana, the second-ever hackathon in the state of Indiana. We hope to run this hackathon in-person over the Summer unless COVID-19 precautions are still in place.

Combat the Patent Prices— Indiana State President

November 2020 - Present

Nonprofit organization established by high schoolers that fights against pharmaceutical patent abuse and advocates for affordable medical prices.

EDUCATION

Carmel High School, Indiana — Academic Honors Diploma

August 2019 - Present

Currently, I am a sophomore at Carmel High School and am working towards the necessary credits to receive the Academic Honors Diploma. Additionally, I am pursuing the International Baccalaureate and AP Scholar with Distinction Diplomas. View my rigorous four-year course schedule [here](#).

Carmel Middle School, Indiana — Principal's Honors Award

August 2016 - May 2019

At Carmel Middle School I received the Principal's Honors Awards which is a distinguished award only awarded to students who maintained a perfect GPA throughout middle school.

SELECTED RESEARCH

Staphylococcus Biofilm Dispersion: Computationally Analyzing Interactions between Nattokinase Binding-Partners via Stacked Generalization Models— Computational Structural Biology Research

Currently working on my 10th Grade Science Fair Project that utilizes Stacked Generalization models from RGN-Protein Modeling Software to determine the Nattokinase-aided *Staphylococcus aureus* Biofilm

FIELDS OF INTEREST

Scientific Research

Bioinformatics

Computational Biology

Structural Biology

Entrepreneurship

Startup Development

Full-Stack Development

Machine Learning & Artificial

Intelligence

Biogeochemistry

LANGUAGES

English

Tamil

Telugu

Spanish

EXAM SCORES

AP World History (2020): 5

ACT (2018): 32

GRADES

9th Grade GPA: 4.45

10th Grade GPA (1st Semester): 4.80

SCIENCE OLYMPIAD

Solon Invitational (2020):
Water Quality 7th Place

Dispersion Pathway.

Potential theories regarding Hot Jupiter propagation around low-metallicity Population I stars— AASTCS 8: Habitable Worlds Conference

Research study conducted by Raghav Sriram, Archit Kalra, and Shirthan Sandadi on potential theories of Hot Jupiters around Population I stars. Utilized data from NASA Exoplanet Archive.

Viability of Pleochroism on predicting Mineral Morphology — Geochemistry Research Project

Currently working on publishing a paper that analyzes the optical characteristics of a Todorokite sample, more specifically its Pleochroism and its implications to Todorokite Mineral Morphology.

SELECTED CLUBS

Science Olympiad— Member

September 2019 - Present

This is my second year participating in Science Olympiad. I compete in Dynamic Planet, Geologic Mapping, Astronomy, Disease Detectives, Water Quality and am part of the A-team.

Science Bowl— Member

August 2020 - Present

I am a club member and part of the C Team in Carmel High School's Science Bowl Team. Science Bowl is a nationally recognized buzzer competition run by the United States Department of Energy.

Biology Club Carmel— Member

August 2020 - Present

Club Member of Biology Club Carmel. We participate in fun biology-related activities and prepare for the USA Biology Olympiad (USABO)

Carmel STEM Club— Member

September 2020 - Present

I am a member of Carmel STEM Club which is a club that helps students at CHS with their science fair and engineering projects.

Carmel Earth Science and Astronomy Club— Lead

September 2020 - Present

I am the Co-Founder of the Earth Science and Astronomy Club and CHS. This club is aimed to help prepare students for the United States Earth Science and Olympiad (USES0) and United States Astronomy and

Medalist

University of Michigan Invitational (2020): Dynamic Planet 1st Place, Water Quality 8th place, Astronomy 8th Place

Boyceville Invitational (2020): Water Quality 1st Place, Disease Dynamic Planet 5th Place,

Pearl City Invitational (2020): Dynamic Planet 1st Place, Disease Detectives 3rd Place, Water Quality 5th Place

Carnegie Mellon Invitational (2020): Dynamic Planet 5th Place, Geologic Mapping 2nd Place, Water Quality 2nd Place

Solon Invitational (2020): Dynamic Planet 1st Place, Geologic Mapping 12th Place, Water Quality 9th Place

MIT Invitational (2021): Dynamic Planet 6th Place, Geologic Mapping 16th Place

Golden Gate Invitational (2021): Water Quality 3rd Place, Geologic Mapping 7th Place

Science Olympiad at University of Pennsylvania (2021): Dynamic Planet 2nd Place, Geologic Mapping 5th Place, Water Quality 1st Place

Indiana State Science Olympiad (2021): Dynamic Planet 1st Place, Geologic Mapping 1st Place, Water Quality 1st Place

Astrophysics Olympiad (USAAO). We also compete in team-based competitions such as the National Oceanic Sciences Bowl (NOSB)

HOSA— *Lead*

September 2020 - Present

I am part of the Activities Planning Team in Carmel HOSA. HOSA stands for Health Occupations Students of America and has numerous healthcare-related competitions.

CHS MedLife— *Member*

August 2020 - Present

I am a member of CHS MedLife, a club at Carmel High School dedicated to students who are interested in going into the healthcare industry.

Carmel Hack Club— *Lead*

December 2020 - Present

Co-Founder of Carmel High School's chapter of the international nonprofit Hack Club. Through this club, we hope to create passionate programmers and set up one of the first hackathons in Indiana. View our website at: <https://carmelhackclub.netlify.app/>.

Artificial Intelligence and Machine Learning Club— *Member*

September 2020 - Present

Member of Artificial Intelligence and Machine Learning Club. On the A-Team for Kaggle Competitions. Have only recently started getting involved with Machine Learning.

Carmel Model UN— *Member*

September 2020 - Present

First-year of participating in Carmel Model UN. Enjoy debating, drafting resolutions, and researching member nations. Have competed in Yale MUN and placed in Vanderbilt MUN.

Carmel Debate— *Member*

August 2019 - Present

Second-year of participating in Carmel Debate. I compete in public forum with Avinash Valuveri and enjoy writing cases and drafting rebuttals.

Political Discussions Club— *Lead*

September 2020 - Present

Officer of Political Discussions Club. We meet weekly to discuss and debate controversial political topics.

SELECTED AWARDS

Chicago TaeKwonDo

Championship: 2nd Place in Form and Breaking

National History Day (NHD):

State Finalist in Group Website

Hoosier Science and

Engineering Fair (HSEF): 8th Grade 1st Place Project

Hoosier Science and

Engineering Fair (HSEF): 10th Grade 3rd Place Project and ISEF qualifier

United States of America

Computing Olympiad (USACO): Gold Rank; Top ~5%

United States of America

Astronomy and Astrophysics Olympiad (USAAAO): NAC Qualifier; Top ~40%

International Medicine

Olympiad (IMDO): Gold Medalist, Top 25

Vanderbilt Model MUN:

Honorable Delegate

Indiana University MUN:

Outstanding Delegate

Great Lakes Bowl: First Place

Voices of Carmel— *Lead*

September 2020 - Present

Founder of Voices of Carmel, a blog and volunteering organization that invokes positive change in the city of Carmel. We spread awareness of numerous issues, create petitions, and organize fundraisers and volunteering opportunities. View our website at:

<https://voicesofcarmel.com/>.

Quill and Scroll Honors Society— *Inductee*

September 2020 - Present

Member of Carmel High School's chapter of the International High School Journalism Honors Society Quill and Scroll.

Carmel SWENext— *Lead*

September 2020 - Present

One of the leaders in Carmel SWENext. We compete in a variety of Engineering and Technology based competitions such as the NIH Brain Initiative Challenge, NASA's space settlement competition, and Lemelson InvenTeam.

ATHLETICS

Tennis— *Carmel High School Junior Varsity*

August 2019 - Present

I have play tennis since 7th Grade and have qualified for the school team in consecutive years

TaeKwonDo— *Third Degree Blackbelt*

2011 - Present

I have competitively competed in TaeKwonDo since I was six years old and I am a Third Degree Blackbelt at GrandMaster Lee's TaeKwonDo