Kaustubh Grama

Bothell High School – Junior, GPA 4.0; University of Washington – College in High School

314 198TH ST SW
Lynnwood, WA 98036
(425) 240-6682
kaustubhgrama2025@gmail.com

EXPERIENCE

Seattle Children's Research Institute, *Ben Towne Center for Childhood Research—Bioinformatics Research Intern*

June 2024 - PRESENT

- ❖ Analyzed single-cell RNA sequencing genomics data using R-studio and Seurat bioinformatics library
- ❖ Engineered linear regression machine learning models to predict cell types in fetal cerebella
- ❖ Applied models to investigate cellular and genetic contributors to medulloblastoma tumors
- ❖ Presented findings to researchers, including the Director of Biomedical Informatics and Medical Education Graduate Program at the University of Washington

Biomanufacturing Certification Training, *AGC Biologics Bothell Facility, Shoreline Community College*

September 2023 - June 2024

- ❖ Transformed *E. coli* with pGLO plasmid, selected for ampicillin resistance, calculated growth and transformation efficiency
- ❖ Used Chromatography and SDS-PAGE to purify proteins
- ❖ Studied growth of antibiotic-resistant *E. coli* grown in varying concentrations of ampicillin and presented findings to a panel of industry professionals
- ❖ Used Aseptic Technique and cGMP to ensure minimal contamination

Kaiser Permanente, *Seattle*

March 2023 - PRESENT

- ❖ Coordinate with fellow volunteers to ensure completion of assigned tasks
- ❖ Provide patient care services in oncology infusion, urgent care, imaging, and eyecare services
- ❖ Assist medical personnel with X-rays and imaging procedures

eSwara School of Fine Arts, Seattle—*Violin Coach*

September 2017 - PRESENT

- ❖ Performances at fundraising events in the greater Seattle area to support artists severely affected by the COVID-19 pandemic
- ❖ Actively seek varied teaching methods to cater to each student's different learning styles and skill levels.

SKILLS

Biotechnology

> Inoculation, SDS-PAGE, Chromatography, Gel Electrophoresis, Polymerase Chain Reaction, ELISA

Computer Science

> Data Analysis, R, Python, Java, PHP, HTML/CSS/Javascript, MySQL

Professional Skills

> Critical Thinking
> Leadership & Teamwork
> Marketing, Microsoft Office
> Oral and written presentation of experimental data

AWARDS

- ❖ 1st place DECA International Career Development Conference for Community Giving Project
- ❖ National Merit Commended Scholar
- ❖ AP Scholar with Distinction - Collegeboard
- ❖ State Champion - Science Olympiad
- ❖ National Qualifier & State Champion - Future Business Leaders of America, DECA

ACTIVITIES

- ❖ Co-president - Science Olympiad
- ❖ Treasurer - Health Occupations Students of America
- ❖ President and Founder - Model UN
- ❖ Treasurer & Social Media Manager – Computer Science
- ❖ Secretary - South Asian Union
- ❖ Vice President - National Honor Society
- ❖ Vice President of Public Relations - DECA

Model United Nations, *Bothell High School—President*

September 2022 - PRESENT

- ❖ Conceptualized a charter and constitution outlining value to students
- ❖ Advocated for interested students to procure an advisor
- ❖ Organized mock conferences to garner interest and recruit members to quadruple membership in the second year
- ❖ Awarded Best Delegate at King County Model United Nations Commission on Science and Technology for Development

Science Olympiad, *Bothell High School—Co-President*

September 2022 - PRESENT

- ❖ Mentored students in life science events, such as Anatomy and Physiology, Chemistry Lab, Ecology
- ❖ Competed at Massachusetts Institute of Technology
- ❖ Placed in the top 3 for Washington State regional and state-level competitions
- ❖ Composed multiple tests for high school and middle school level competitions across Washington State

DECA, *Bothell High School—Vice President of Public Relations*

September 2023 - PRESENT

- ❖ Assisted in holding weekly informational meetings for chapter members to learn about various DECA opportunities
- ❖ Managing Christmas toy drive in partnership with Salvation Army involving 75% of members

Schoolhouse, *Khan Academy—Digital SAT Tutor*

Feb 2023 - March 2023

- ❖ Designed personalized lesson plans for five students to improve their SAT reading scores
- ❖ Conducted weekly assessments to gauge student progress

Projects

- ❖ Researched and presented findings on *G. aculeatus* relating to regulation of DNA expression and morphological evolution
- ❖ Analyzed effects of introducing pKAN-R and ampR into *E. coli* via transformation in the presence of ampicillin antibiotic and arabinose
- ❖ Utilized enzyme-linked immunoassays to detect the presence of FSH hormone in urine of A. melanoleuca to study patterns of ovulation
- ❖ Developed a web application to organize data concerning organizations collaborating with the Career and Technical Education Department of Bothell High School

RELEVANT COURSES

- ❖ AP Biology
- ❖ AP Chemistry
- ❖ AP Computer Science Applications
- ❖ AP Computer Science Principles
- ❖ Calculus IV
- ❖ AP Physics I
- ❖ AP Physics C: Mechanics