Curriculum Vitae

Personal Information

Name: Viktoria Haghani | **Phone Number:** (909)272-6916 | **Email:** vhaghani@ucdavis.edu

Education

Doctor of Philosophy in Integrative Genetics and Genomics*(In Progress, 2025)*: University of California, Davis; Davis, California; GPA: 3.95

Bachelor of Science in Genetics and Genomics(March 2020): University of California, Davis; Davis, California; GPA: 3.7

Summer Courses at Riverside City College (July 2017): Riverside City College; Riverside, California; GPA: 4.0

High School Diploma (May 2016): Jurupa Hills High School; Fontana, California; GPA: 4.0

Publications

Pending

Haghani V., Goyal A., Zhang A., Sharifi O., Mariano N., Yasui D.H., Korf I.F., LaSalle J.M. *Submitted*. "Improving rigor and reproducibility in chromatin immunoprecipitation assay data analysis workflows with Rocketchip" *Briefings in Bioinformatics*.

2024

Sharifi O., **Haghani V.**, Neier K., Fraga K., Korf I.F., Hakam S., Quon G., Johansen N., Yasui D.H., LaSalle J.M. 2024 Oct 10. "Sex-specific single cell-level transcriptomic signatures of Rett syndrome disease progression." *Communications Biology*.

Gutierrez Fugon O.J., Sharifi O., Heath N., Soto D.C., Gomez J.A., Yasui D.H., Mendiola A.J.P., O'Geen H., Beitnere U., Tomkova M., **Haghani V.**, Dillon G., Segal D.J., LaSalle J.M. 2024 July 24. "Integration of CTCF loops, methylome, and transcriptome in differentiating LUHMES as a model for imprinting dynamics of the 15q11-q13 locus in human neurons." *Human Molecular Genetics*.

Cheong S., Jay-Russell M.T., Chandler-Khayd C., Di Francesco J.,**Haghani V.**, Aminabadi P., Williams S.R., Gaudin A.C.M., Tautges N., Pires. A.F.A. 2024 Feb 20. "Presence of foodborne pathogens and survival of generic Escherichia coli in an organic integrated crop-livestock system." *Frontiers in Sustainable Food Systems*.

2023

Khayd C.C., Di Francesco J., Baron J.N., Ramos T.M., Aminabadi P., Jay-Russell M.T., **Haghani V.**, Millner P.D., Pagliari P., Hutchinson M., Kenney A., Hashem F., Martinez-Lopez B., Bihn E.A., Clements D., Shade J.B., Sciligo A.R., Pires A.F.A. 2023 Aug 25. "Risk factors associated with the prevalence of Listeria monocytogenes in manured soils on certified organic farms in four regions of the United States." *Frontiers in Sustainable Food Systems*.

Pires A.F.A, Ramos T., Baron J.N., Millner P.T., Pagliari P., Hutchinson M.,**Haghani V.**, Aminabadi P., Kenney A., Hashem F., Martinez-Lopez B., Bihn E.A., Clements D., Shade J.B., Sciligo A.R., Jay-Russell M.T. 2023 Feb 22. "Risk factors associated with the prevalence of Shiga-toxin producing Escherichia coli (STEC) in manured soils on certified organic farms in four regions of the

USA." *Frontiers in Sustainable Food Systems*.

2021

Ramos T., Jay-Russell M.T., Millner P.T., Baron J.N., Stover J., Pagliari P., Hutchinson M., Lilley J., Rowley N., **Haghani V.**, Aminabadi P., Kenney A., Hashem F., Martinez-Lopez B., Bihn E.A., Clements D.P., Shade J.B., Sciligo A.R., Pires A.F.A. 2021 Oct 15. "Survival and persistence of foodborne pathogens in manure-amended soils and prevalence on fresh produce in certified organic farms: A multi-regional baseline analysis." *Frontiers in Sustainable Food Systems*. doi:10.3389/fsufs.2021.674767.

Lambert J.T., Su-Feher L., Cichewicz K., Warren T.L., Zdilar I., Wang Y., Lim K.J., Haigh J., Morse S.J., Canales C.P., Stradleigh T.W., Castillo E., **Haghani V.**, Moss S., Parolini H., Quintero D., Shrestha D., Vogt D., Byrne L.C., Nord A.S. 2021 Oct 4. "Parallel functional testing identifies enhancers active in early postnatal mouse brain." *eLife*. 2021;10:e69479.

2020

Pires A.F.A., Stover J., Kukielka E., **Haghani V.**, Aminabadi P., Ramos T., Jay-Russell M.T. 2020 Jun 5. "Salmonella and generic E. coli prevalence in meat and produce sold at farmers markets in Northern California." *Journal of Food Protection*. 2020;10.4315/JFP-20-079. doi:10.4315/JFP-20-079

Pires A.F.A., Kukielka E., **Haghani V.**, Stover J., Ramos T., Van Soelen J.E., Jay-Russell M.T. 2020 Oct. "Survey of farmers' market managers in California: food safety perspectives."*Journal of Extension*.

Grants

Funded

Grant #CACALV-AH-411. $20,000. Funding Organization: USDA NIFA, UC Davis Center for Food Animal Health. 05/28/2021 - 06/30/2022. Whole genome sequencing of STEC isolates from sheep fecal samples and 16S rRNA amplicon sequencing of sheep fecal samples to identify microbiome changes and potential food safety risks in grazing sheep. PI: Alda Pires. Collaborators: Elizabeth Maga (Co-I), Michele T. Jay-Russell (Co-I), Roselle C. Busch (Co-I), **Viktoria Haghani (Co-I)**.

Fellowships and Scholarships

Autism Science Foundation and Rett Syndrome Research Trust Fellowship (2022)

JXTX Foundation Genome Informatics Scholarship Award (2021)

Momeni Foundation Scholarship Recipient (2016)

Conference Abstracts, Posters, and Presentations

2025

Andrade J., Maharaj A., Le J., Racca M., **Haghani V.**. The effects of varying concentrations of soil salinity on crop growth. Poster presented by J. Andrade, A. Maharaj, J. Le, and M. Racca at Connected Community Learning (CCL) Biotechnology Academy Open House 2025.

Kuodza G.E., Mouat J.S., Krigbaum N.Y., **Haghani V.**, Thrall E., Kawai R., Hakam S., Rodriguez Y.J.L., Sullivan T.N., Mendiola A.J.P., Yasui D.H., Tran T.A., Sharifi O., Torres C., Bennett D., Schmidt R.J., La Merrill M.A., Cirilo P.M., Hertz-Picciotto I., Cohn B.A., LaSalle J.M. Newborn

blood DNA methylation correlates risk of autism spectrum disorders with grandparental age, alcohol intake, and cigarette smoking. Poster will be persented by Kuodza G.E. at the International Society for Autism Research (INSAR) Conference 2025.

2024

Haghani V., Yasui D.H., Hakam S., Sharifi O., Korf I.F., LaSalle J.M. Defining the role of MeCP2e1 Rett Syndrome Symptom Progression. Poster presented by V. Haghani at the World Rett Syndrome Congress 2024.

Gutierrez Fugon O.J., Sharifi O., Heath N., Soto D.C., Gomez J.A., Yasui D.H., Mendiola A.J.P., O'Geen H., Beitnere U., Tomkova M., **Haghani V.**, Dillon G., Segal D.J., LaSalle J.M. Integration of CTCF loops, methylome, and transcriptome in differentiating LUHMES as a model for imprinting dynamics of the 15q11-q13 locus in human neurons. Abstract presented by J.M. LaSalle at the Angelman Syndrome Foundation Family Conference and Research Symposium 2024.

Immoos S., Osornia L., Scott J., **Haghani V.**. Effect of natural vs. chemical pesticides on aquatic microorganisms. Poster presented by Immoos S., Osornia L., and Scott J. at Connected Community Learning (CCL) Biotechnology Academy Open House 2024.

2023

Lu R., Nguyen D., **Haghani V.**. Measuring Sanitization Product Effectiveness Against Bacteria. Poster presented by R. Lu and D. Nguyen at Connected Community Learning (CCL) Biotechnology Academy Open House 2023.

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M. Integration of single-nuclear RNA-seq and spatial transcriptomic analysis of differentially expressed genes in a Rett Syndrome mouse model. Poster presented by V. Haghani at the UC Davis Human Genomics Symposium 2023.

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M. Defining the role of MeCP2e1 Rett Syndrome Symptom Progression. Poster presented by V. Haghani at the American Society of Human Genetics Meeting 2023.

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M. Integration of single-nuclear RNA-seq and spatial transcriptomic analysis of differentially expressed genes in a Rett Syndrome mouse model. Poster presented by V. Haghani at the UC Davis Genome Center Halloween Symposium 2023.

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M. Integration of single-nuclear RNA-seq and spatial transcriptomic analysis of differentially expressed genes in a Rett Syndrome mouse model. Poster presented by V. Haghani at the Conceptual Power of Single-Cell Biology Symposium 2023.

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M. Defining the role of MeCP2e1 Rett Syndrome Symptom Progression. Haghani V. invited to give a 10-minute oral presentation at the MESA Undergraduate Research Scholars Program Oral Presentation Workshop 2023.

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M. Defining the role of MeCP2e1 Rett Syndrome Symptom Progression. Poster presented and flash talk given by V. Haghani at the International Rett Syndrome Foundation Rett Syndrome Scientific Meeting 2023.

Gill G., Aigbe L., Saetern M., Liu X., **Haghani V.** How Do Different Environmental Conditions Affect Biofilm Formation? Poster presented by Gill G., Aigbe L., Saetern M., and Liu X. at Connected Community Learning (CCL) Biotechnology Academy Open House 2023.

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M. Defining the role of MeCP2e1 Rett

Syndrome Symptom Progression. Poster presented by V. Haghani at the Bay Area Chromatin Club Symposium 2023.

2022

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M. Defining the role of MeCP2e1 Rett Syndrome Symptom Progression. Poster presented by V. Haghani at the UC Davis Human Genomics Symposium 2022 and received a $25 prize for winning the poster contest.

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M. Defining the role of MeCP2e1 Rett Syndrome Symptom Progression. Poster presented by V. Haghani at the UC Davis Genome Center Halloween Symposium 2022.

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M. Clarifying the role of MeCP2 in the Timing of Symptom Progression in Rett Syndrome. Abstract submitted, poster presented, and 10-minute oral talk given by V. Haghani at the 6th Annual Biomedical Research Graduate Student Symposium 2022.

Sharifi O., Yasui D.H., Korf I.F.,**Haghani V.**, Hakam S., Johansen N., Fraga K., LaSalle J.M. Longitudinal cortical snRNA-seq reveals sexually dimorphic cellular trajectories of disease progression in a mouse model of Rett Syndrome. Poster presented by O. Sharifi at the Developmental Origins of Health and Disease (DOHaD) World Congress 2022.

2021

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M. Elucidating the role of MeCP2 in the timing of symptom progression in Rett Syndrome. Poster presented by V. Haghani at the UC Davis Human Genomics Symposium 2021 and received a $25 prize for winning the poster contest.

Haghani V., Yasui D.H., Sharifi O., Korf I.F., LaSalle J.M.Rocketchip: A Comprehensive bioinformatics workflow for ChIP-seq data analysis. Poster presented by V. Haghani at the 2021 CSHL Genome Informatics Meeting in November. Funded by JXTX Foundation Genome Informatics Scholarship.

Haghani V. Attendee at Diversity in STEM Conference at UC Davis in 2021. Attended speaker events and workshops for topics related to diversity, equity, and inclusion and STEM and in graduate school

Aguirre K., **Haghani V.**, Cheong S., Busch R., Jay-Russell M.T., Pires A. Comparison of fecal microbiomes in grazing and non-grazing sheep and association with foodborne pathogen shedding. Poster presented by K. Aguirre at the 2021 Educational Enrichment and Outreach Program (EEOP) Undergraduate Public Health Scholar Program Poster Symposium at UC Davis.

Cheong S., Aminabadi P., Jay-Russell M.T., Chandler C.,**Haghani V.**, Williams S.R., Tuatges N., Gaudin A., Pires A.F.A. Crop-livestock integration in vegetable production: Survival of generic E. coli and non-O157 STEC in Organic Fields Grazed by Sheep. Abstract presented by S. Cheong at the 2021 International Association for Food Protection Conference.

Warren T.L., Lambert J.T., Su-Feher L.,**Haghani V.**, Castillo E., Parolini H., Shrestha D., Nord A.S. In vivo AAV-based transient enhancer-reporter assays in mouse brain. Poster presented by T.L. Warren at the 2021 Biology of Genomes (Virtual) Meeting at Cold Spring Harbor Laboratory.

2019

Stover J., Jay-Russell M.T.,**Haghani V.**, Aminabadi P., Ramos T., Pires A. Salmonella and indicator bacteria profiles of produce and meat products sold in Northern California farmers' markets: Implications for microbial food safety. Abstract presented by A. Pires at the 2019

International Association for Food Protection Meeting.

Haghani V. Attendee at Net Impact: Widening the Lens Conference in 2019 in Detroit, Michigan. Acted as a mentor in a workshop targeted at improving LinkedIn profiles and networking ("Be the Mentor"). Acted as a student dinner lead, taking a group of 15 students out to dinner to discuss the Up to Us project and advise students on their university's campaign.

2018

Haghani V. Attendee at Net Impact: Outside the Lines Conference in 2018 in Phoenix, Arizona. Attended speaker events and workshops for topics related to sustainability and leadership skills.

Research Experience

Graduate Student Researcher | LaSalle Lab and Korf Lab at UC Davis | Davis, CA | March 2021 - Present

- Studying the molecular mechanisms of Rett Syndrome in the LaSalle Lab (primary PI) using CUT&RUN, WGBS, snRNA-seq, and spatial transcriptomics
- Conduct gene ontology and weighted gene correlation network analysis for NGS projects
- Develop software (Rocketchip, Epigenerator) to automate sequence data analysis pipelines

Lab Manager | Pires Lab at UC Davis | Davis, CA | February 2017 - October 2020

- Acted as Student Assistant II for 1.5 years and lab manager for 2 years to maintain lab safety and lab projects
- Conducted field work, sample collection, and sample processing for various projects
- Examined microbial profiles of manure and agricultural samples to ensure food safety and manage population health
- Conducted survey for farmers' market managers to ensure the enforcement of food safety practices
- Carried out student interviews and manage student hiring and training
- Participated in manuscript and grant writing

Volunteer Research Assistant | Nord Lab at UC Davis | Davis, CA | May 2018 - March 2020

- Investigate putative enhancer sequences linked to Autism Spectrum Disorder and Schizophrenia to validate enhancer activity
- Create an enhancer-reporter construct and carry out a transformation for amplification of target DNA sequences
- Conduct image analysis using FIJI to assess activity of the tested enhancers

Student Lab Assistant II | Western Institute for Food Safety and Security | Davis, CA | July 2019 - September 2020

- Work on a project to quantify different pathogens present in environmental samples
- Make and maintain media stocks in the lab

Student Lab Assistant II | Boundy-Mills Lab at UC Davis | Davis, CA | March 2019 - July 2019

- Analyze sequence data to generate consensus sequences, enter them into a database, and BLAST search sequences for species identification
- Maintain the Phaff yeast collection and revive different strains when necessary

Professional Workshops

Navigating Charged Discussions | UC Davis Center for Educational Effectiveness | 2024

Seeking Alignment: Writing an Artificial Intelligence Teaching Philosophy Statement| UC Davis Center for Educational Effectiveness | 2024

Syllabus Design for Equity | UC Davis Center for Educational Effectiveness | 2024

Data Analysis Collaboratory | UC Davis DataLab | 2023

Graduate Anti-Racism Symposium | UC Davis Diversity, Equity, and Inclusion & UC Davis Grad Studies | 2021

A Hands-On Introduction to Conda | National Institutes of Health Common Fund Data Ecosystem | 2021

Accessibility and Inclusion in Teaching: Perspectives of Autistic and Neurodivergent Students | UC Davis Autism and Neurodiversity Community | 2020

Teaching Experience

GGG 280 - Genetics, Racism, & Inequality | UC Davis | Davis, CA | 2022

- Conceptualized and founded the course alongside Dr. Cecilia Giulivi and Dr. Dannika Banasch
- Ran a weekly discussion section that focused on a topic pertaining to the intersection of genetics-based racism and inequality
- Highlighted associations between theories of race, genetic science, and racism
- Assessed the imact of and responses to bias and lack of diversity in science

Teaching Assistant for BIS 101 (Genes and Gene Expression)| UC Davis | Davis, CA | Spring 2022

- Ran three discussion sections for a total of 120 students (combined discussions from two overall course sections)
- Graded weekly homework, attendance, and exams
- Provided exam resources
- Held weekly office hours to answer student questions

Mentoring Experience

Letters to a Pre-Scientist (LPS) | LPS | North Carolina | 2021-Present

- Send four snail-mail letters to students from low-income communities over the course of the academic school year to inform them of STEM careers, how to navigate higher education, how to overcome obstacles, and to inspire them to pursue a career in STEM

Sheldon High School Biotech Academy eMentor Program | Sheldon High School | Sacramento, CA | 2021-Present

- Mentor students every academic year by discussing college choices, working on resume writing, learning about social networking, discussing how to overcome failures and challenges, and learning about soft workplace skills
- Guide students in writing project proposals and creating a poster to present on their project
- Help a group of students investigate factors influencing algal growth and its implications in biofuel production

Integrative Genetics and Genomics (IGG) Graduate Group Internal Mentorship Program| UC Davis | Davis, CA | 2021-Present

- Regularly meet with first-year IGG students per year to assist with setting up rotations, choosing a lab, and advising about funding

Multiculturalism in Agriculture, Natural Resources, and Related Sciences (MANRRS)| UC Davis | Davis, CA | 2023

- Meet with an undergraduate student throughout the quarter and advise them on classes, internships, and other career opportunities

College of Biological Sciences (CBS) Community, Mentorship, and Training Program (CoMeT) | UC Davis | Davis, CA | 2021 - 2022

- Coordinate social activities for the program to promote mentor-mentee bonding

CITRIS EDGE in STEM Mentoring Program| CITRIS and the Banatao Institute | Berkeley, CA | Summer 2021

- Learn how to effectively mentor women and historically under-represented students in STEM
- Mentor a senior undergraduate student by walking her through joining a research lab and mapping out graduate school programs and applications for when she applies

Jesse Bethel High School Future Medical Professional's Club Mentoring Program| Jesse Bethel High School |Vallejo, CA | 2021-2022

- Mentor students by sharing career choices, opportunities and challenges in my career choice, and mapping out the mentee's career and academic plans

Lab Manager | Pires Lab at UC Davis | Davis, CA | February 2017 - October 2020

- Hired and trained students in basic lab techniques and on lab project workflows
- Mentored four undergraduate students
- Presented weekly trainings on various STEM topics (writing a manuscript, the peer-review process, scientific communication, etc.)

BioLaunch Mentor Collective | UC Davis | Davis, CA | 2018-2020

- Provided academic and career advice to students beginning at UC Davis
- Mentored one third-year undergraduate transfer student and two first-year undergraduates

Students Tutoring Students | UC Davis | Davis, CA | 2017-2018

- Acted as the secretary for the 2017-2018 school year
- Fostered a community of scholars that were motivated to learn
- Provided a forum for students to cooperate with each other
- Improved the community by providing the tools to enhance the learning experience
- Help students find passion and joy in learning and teaching others

Other Experiences and Affiliations

Student Lead for the Davis Python Users Group(DPUG) | UC Davis | Davis, CA | 2024-Present

- Create and manage the quarterly speaker schedule
- Ensure smooth operation of meetings and events
- Send out meeting announcements to members

- Recruit new members and speakers for the group

Webmaster for the Integrative Genetics and Genomics (IGG) Graduate Group| UC Davis | Davis, CA | 2024-Present

- Update and maintain IGG Student Executive Committee Website for IGG students

Membership Committee for the Integrative Genetics and Genomics (IGG) Graduate Group| UC Davis | Davis, CA | 2023-2024

- Review applications for faculty interested in joining IGG

Recruitment Officer for the Integrative Genetics and Genomics (IGG) Graduate Group| UC Davis | Davis, CA | 2021-2023

- Organize recruitment dates, recruitment activities, and interviews for prospective students

Diversity, Equity, and Inclusion (DEI) Chair for the Integrative Genetics and Genomics (IGG) Graduate Group | UC Davis | Davis, CA | 2021 - 2023

- Help create and hold the course: GGG 280 - Genetics, Racism, & Inequality
- Facilitate meetings, agendas, and communications for the DEI Committee
- Compile and distribute learning resources for students and faculty in IGG
- Act as a liaison between the student and faculty DEI committees
- Coordinate plans, action items, and activities carried out by the DEI Committee
- Secure $1000 in funding from the Graduate Student Association to support DEI efforts, including quarterly seminars featuring guest speakers such as Dr. Charla Lambert
- Secure $375 in funding from the College of Biological Sciences Diversity, Equity, Inclusion, and Justice Initiative Grant to build community through DEI workshops

Diversity, Equity, and Inclusion (DEI) Committee for the Integrative Genetics and Genomics (IGG) Graduate Group | UC Davis | Davis, CA | 2020 - 2023

- Provide education and training on DEI issues, including resources for underrepresented and historically marginalized groups
- Advance student diversity and retention in the IGG graduate group through improved mentorship opportunities
- Develop a sustainable DEI strategy and effort within the IGG graduate group
- Assess required curriculum to better incorporate and address DEI standards

Net Impact Davis | UC Davis | Davis, CA | 2016-2020

- Worked in a non-profit organization dedicated to finding problems and solutions within the community, including, but not limited to issues pertaining to water, education, composting, food, poverty, and recycling
- Worked in a team of three and was awarded $250 for the Farm Internship Program
- Acted as Director of Finances from 2017-2018 to accurately maintain and allocate funds from two accounts for a group of 15 to kick-start projects and provide members with necessary resources
- Acted as President from 2018-2019 participating in the national Up to Us competition, and implemented a recycling workshop series and recycling competition at Dixon Montessori Charter School that brought in 7985 recyclable items over the course of one month
- Acting as President for 2019-2020 participating in the national Up to Us competition, and looking to implement new projects and create solutions to local problems

Genetic Counseling Club | UC Davis | Davis, CA | 2017-2019

- Participated in mock case conferences and educational presentations regarding genetic counseling
- Acted as Treasurer from 2018-2019 to maintain and allocate funds to club activities
- Raised funds to provide resources to members
- Worked closely with the genetic counseling club to promote a learning environment and provide interested individuals with resources and experience

Genetic Counseling Shadow Program | UC Davis Mind Institute | Sacramento, CA | January 2018 - February 2018

- Shadowed genetic counselor Rebecca Freeman at the UC Davis Medical Center
- Watched case consultations and case conferences in both general and metabolic genetics
- Successfully took family history for a patient

Food Service Worker | UC Davis Student Housing and Dining Services | Davis, CA | December 2016 - November 2017

- Worked in the university dining common
- Gained experience with customer service
- Worked in a fast-paced environment
- Learned to multi-task by tending to all customers' needs while ensuring that all job responsibilities

Projects

Planet Heroes: Sustainability is Elementary - Easy as TK - 8 (Recycling Competition and Workshop Series) | Net Impact Davis | Davis, CA | 2019

- Wrote a formal project proposal and project evaluation
- Encouraged kids to recycle by implementing a competition that brought in 7985 recyclable items and raised $440.22
- Used Powtoon to create 7 workshops that encourage kids to recycle and promote the competition at Dixon Montessori Charter School

Up to Us 2018 and 2019 | Up to Us | Oakland, CA | Fall 2018, Fall 2019

- Acted as project manager for a competition to raise awareness of the national debt
- Made 33 educational social media posts and held 4 events that engaged a total of 657 students at UC Davis to promote awareness of the US national debt in regard to sustainability (2018)
- Collected approximately 300 pledges that got sent to local representatives (2018-2019)
- Facilitated and maintained successful partnerships with on-campus clubs, external partners, and keynote speakers for Up to Us events
- Wrote a final report for the competition (2018)
- Became a Top 20 Team in the national competition
- Got featured on Good Day Sacramento

The More You Know, The More You Grow| Citrus Tech for Social Good | Davis, CA | 2018

- Planned a design for a decision-making tool that is able to appropriate time to water plants, and the amount of water that should be given to each respective plant
- Received $1,732 in funding from Tech for Social Good

Farm Internship Program | Net Impact Davis | Davis, CA | 2016-2017

- Wrote a project proposal and feasibility report with team members

- Planned an internship program curriculum to unite farmers with students to promote water conservation and mange water usage in agriculture
- Pitched in front of a panel on April 27, 2017 at the UC Davis Innovation Institute for Food and Health
- Awarded $250 in funding from UC Davis Innovation Institute for Food and Health

Qualifications/Skills

Intermediate/Advanced bioinformatics experience (Python (primary), R, GitHub, Conda, Snakemake)

NGS Data Analysis (CUT&RUN, WGBS, snRNA-seq, Spatial Transcriptomics, RNA-seq), including Gene Ontology and Weighted Gene Correlation Network Analysis

Management of high-performance computing environments

Type 90+ words per minute

Strong oral and written communication skills

Ability to prioritize and perform tasks with minimal supervision

Website creation/maintenance

- https://ucanr.edu/sites/Small_Farms_/
- https://mmi-lab.ucdavis.edu/
- https://vhaghani26.github.io/

Languages

English (fluent speaking, reading, and writing)

Western Armenian (conversational speaking, basic reading and writing)

Professional Affiliations

UC Davis Data Lab Affiliate (2024-Present)

American Society of Human Genetics Member (2023)

American Association for the Advancement of Science (2021-2022)

Phi Sigma Pi National Honor Society Invitee (2018-2021)

Honor Society Foundation (2017-2021)

Prytanean Women's Honor Society Invitee (2017-2019)

Golden Key International Honour Society Invitee (2017- 2019)

Net Impact Davis Undergraduate Chapter (2016)

California Aggie Student Alumni Association (2016)

The National Academy of Future Physicians and Medical Scientists (2015)

The National Society of High School Scholars (2016)

National Honor Society (2012)

National Junior Honor Society (2010)

Honors and Awards

Interviewed by The California Aggie (2018)

UC Davis College of Biological Sciences Dean's Honors List (Winter 2017)

UC Davis College of Biological Sciences Dean's Honors List (Fall 2016)

Valedictorian of Jurupa Hills High School (2016)

Top 1% of San Bernardino County Award (2015)

Received 7 gold medals for academic achievement in high school (2013-2016)

Links

- GitHub
- ORCiD
- LinkedIn
- Twitter

Please note that not all platforms may be up to date.