

California State University, Fresno Foundation

POSTDOCTORAL SCHOLAR IN PRECISION VITICULTURE – DEPARTMENT OF VITICULTURE & ENOLOGY/VITICULTURE AND ENOLOGY RESEARCH CENTER JOB ANNOUNCEMENT #21-227

<p>POSITION & SUMMARY :</p>	<p>Full-time, benefited position with the Department of Viticulture & Enology/Viticulture and Enology Research Center through the California State University, Fresno Foundation. The Department of Viticulture & Enology/Viticulture and Enology Research Center is seeking a Post-Doctoral Scholar who is experienced in precision, automated and digital agriculture and is passionate about Machine learning/Deep learning applied to chemometrics, computer vision, or remote sensing problems. We are interested in working with a motivated scholar who can think creatively and practically about production-oriented sensing and “big data” applications in agriculture. Strong quantitative background is preferred (as demonstrated by publications), experience with hyperspectral imagery and hands-on electronic ability is a plus.</p> <p>This position is based within the Department of Viticulture & Enology/Viticulture and Enology Research Center, through the California State University, Fresno Foundation. The selected candidate will also have the opportunity to collaborate with scholars from other national and international universities within multi-institution projects funded from AVF, USDA, CDFA and CSU-ARI. Within overarching project goals, the candidate will have intellectual freedom to develop and pursue the research directions they find most interesting. Mentorship will focus on helping the candidate meet their professional development goals, whether in academia or elsewhere.</p> <p>The position is 100% time (40 hours per week), benefited, and funded for 12 months initially, may be renewed based on funding and contingent on satisfactory progress.</p>
<p>ESSENTIAL JOB FUNCTIONS:</p>	<p>Under the supervision of Dr. Luca Brillante, the incumbent’s duties and responsibilities will include, but are not limited to:</p> <ul style="list-style-type: none"> • Coordinate and optimize the graduate student team efforts in data acquisition with hyperspectral sensors in the lab and in the field using multiple supports (ATVs, UAVs, tripods etc.). • Develop and validate algorithms to map grape composition (primarily sugars, acids and flavonoids) from multi-source imagery, with a focus on in-house hyperspectral imaging. • Develop automatic workflow for image analysis and decision support. • Build statistical models to inform and predict grape composition and agriculture production across scales. • Develop and pursue new research directions related to integrated hyperspectral imagery and artificial intelligence approaches in precision agriculture with a focus on grapes. • Present results at conferences, prepare manuscript and publish results in peer-reviewed journals. • Extension, outreach and mentorship duties as needed. • Other duties as assigned.
<p>POSITION REQUIREMENTS:</p>	<p><i>To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.</i></p> <ul style="list-style-type: none"> • PhD in Plant Science, Agriculture Engineering, Earth Science, Computer Science, Applied Mathematics, Horticulture, Environmental Science or related fields by start date (ABD considered) • Strong quantitative expertise, such as in applied statistics and machine learning • Skilled in laboratory analysis, particularly through High Performance Liquid Chromatography • Experience in programmatic processing of images • Solid programming skills in R (preferred) or Python

	<ul style="list-style-type: none"> • Demonstrated excellent research capabilities required to carry out innovative and insightful research • Strong scientific communication skills as evidenced by peer-reviewed publications, and conference presentations • Willingness to collaborate and demonstrated ability to communicate effectively across disciplines • Valid driver's license <p>Preferred Skills:</p> <ul style="list-style-type: none"> • Experience in viticulture • Experience with hyperspectral imaging • Experience with UAV methods • Experience with microcontrollers and with custom electronic devices
COMPENSATION:	\$4,455.00 per month. Benefits include medical, dental, vision, life insurance, and vacation, sick, and holiday pay.
FILING DEADLINE:	Application review begins immediately; open until filled.
TO APPLY:	<p>Please visit the Auxiliary Human Resources page at https://auxiliary.fresnostate.edu/association/hr/ for job announcement and application. Applications may be mailed, emailed, faxed or delivered in person to:</p> <p>California State University, Fresno Auxiliary Human Resources 2771 E. Shaw Ave. Fresno, CA 93710 Fax: (559) 278-0988</p> <p>E-mail completed application & resume to: HRAUX@LISTSERV.csufresno.edu</p>

RESUMES WILL NOT BE ACCEPTED WITHOUT A COMPLETED APPLICATION

*California State University, Fresno is a smoke free campus. For more information, please click <http://fresnostate.edu/adminserv/smokefree/index.html>
Employment for this position is by the California State University, Fresno Foundation. This is not a State of California position.*

AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY/ADA EMPLOYER

California State University, Fresno Auxiliary Services is proud to be part of the Fresno State community. As part of the campus community, Auxiliary Services follows the CSU policy that requires all faculty, staff and students who are accessing campus facilities at any university location to be immunized (fully vaccinated) against the virus that causes COVID-19. The policy does allow for medical or religious exemption from the immunization requirement. Auxiliary Services requires all of its employees to be fully vaccinated against COVID-19 or present a medical or religious exemption and any appropriate backup documentation. Fully vaccinated is defined as having received the dose at least 14 days prior to being on boarded, if selected. Current and new employees are required to adhere to this policy by September 30, 2021 and remain in adherence after that date.