# Sarah Allec

sarah.allec@gmail.com | (951)217-1971 | linkedin.com/in/sarah-allec

### **SUMMARY**

Highly motivated interdisciplinary researcher with experience in computational chemistry and materials science, data science, and high-performance computing. Has research and course experience in C++, Python, and bash programming languages, as well as a variety of computational chemistry/materials science programs (e.g., VASP, Gaussian, CP2K, Quantum Espresso, Gromacs, LAMMPS). Passionate about collaborative and interdisciplinary research and development.

### **EMPLOYMENT**

Citrine Informatics 2022 - Present

#### Research Scientist

Supervisor: James Saal

- Perform research in materials informatics for a variety of applications and material domains
- Engage with collaborators at universities, national laboratories, and other companies
- Aid in the preparation of responses to requests for proposals (RFPs)
- Publish technical work in peer-reviewed journal articles, case studies, and blog posts

### Pacific Northwest National Laboratory

2020 - 2022

#### Postdoctoral Research Associate

Supervisor: Marat Valiev

- Conducted research on the computational design and modeling of carbon capture solvents and surface catalysts using *ab initio* molecular dynamics and density functional theory
- Collaborated with team members as well as with multidisciplinary research groups at PNNL and universities
- Wrote and published peer-reviewed journal articles concerning research findings

### **EDUCATION**

## University of California Riverside

Ph.D. in Materials Science & Engineering, 3.96 GPA

2020

Concentration: Computational Materials Science & Engineering

Advisor: P. Alex Greaney

M.S. in Materials Science & Engineering, 3.96 GPA  Concentration: Computational Materials Science & Engineering  Advisor: Bryan M. Wong	2018
B.S. in Mathematics (Applied), 3.97 GPA, <i>Summa cum laude</i> Concentration: Physics	2015
LEADERSHIP EXPERIENCE  Association for Women in Science, UC Riverside: Co-President  • Set goals, vision, and direction for AWIS UCR  • Lead all general and board meetings	2019-2020
<ul> <li>Serve as official representative within and outside of UCR</li> <li>Association for Women in Science, UC Riverside: Treasurer</li> <li>Maintained AWIS UCR's finances through budgeting and allocation of general funds</li> <li>Secured \$2000 sponsorship from UCR's Dean of the College of Natural &amp; Agricultural networking brunch</li> </ul>	2018-2019 Sciences for
<ul> <li>FIRST LEGO League Coach</li> <li>Coached a team of 5 middle school students in LEGO robot design, programming, and</li> <li>Taught a corresponding robotics class for homeschooled students</li> </ul>	2015-2016 d teamwork
<ul> <li>UCR Academic Resource Center: Supplemental Instruction Mentor</li> <li>Mentored a group of 7 SI Leaders</li> <li>Organized and facilitated SI Leader training</li> </ul>	2014-2015
<ul> <li>UCR Academic Resource Center: Supplemental Instruction Leader</li> <li>Facilitated weekly study sessions in historically difficult courses</li> <li>Collaborated with UCR faculty</li> </ul>	2013-2015
VOLUNTEER EXPERIENCE School on Wheels Tutor	2018-Present
<ul> <li>Tutor and mentor homeless students on a weekly basis in all subjects</li> <li>Monitor grades of student and communicate with teachers regarding progress</li> <li>Act as a positive and supportive role model for students</li> </ul>	-010   1036  t