Sarah Allec
Research Scientist

Highly motivated data scientist with experience in **data management, artificial intelligence**, and **high-performance computing**. Has research and course experience in **C++, Python**, and **bash programming languages**, as well as a variety of **Python-based machine learning libraries**. Passionate about collaborative and interdisciplinary data-driven decision-making.

✉ sarah.allec@gmail.com

📱 (951)217-1971

📍 Boise, ID, United States

🔲 sarah-allec.github.io/

in linkedin.com/in/sarah-allec

○ github.com/sarah-allec

SKILLS

Coding: Python, C++, bash scripting

Machine learning: scikit-learn, pytorch

Data: SQL, JSON

UI: Streamlit

OS: Windows, MacOS, Linux

OUTREACH

Community Volunteer
Interfaith Sanctuary

2023 - Present

Boise, ID

Greet and check in guests, support shelter operations, data management

Workshop Leader
Citrine Informatics

2023

San Luis Obispo, CA

Led a workshop for educators at the North American Materials Education Symposium

WORK EXPERIENCE

Research Scientist II
Citrine Informatics

10/2022 - Present   *Remote*

Citrine Informatics is the world leader in generative AI for materials and chemicals product development.

Tasks

- **Perform cutting-edge research** in the application of machine learning to materials design.
- **Manage** technical aspects of funded programs.
- **Collaborate** with researchers at universities, national labs, and other companies.

Contact : James E. Saal - jsaal@citrine.io

Postdoctoral Research Associate
Pacific Northwest National Laboratory

09/2020 - 09/2022   *Richland, WA*

PNNL is a leading center for scientific discovery in chemistry, data analytics, Earth science, sustainable energy, and national security.

Tasks

- Performed research on the computational design of organic molecules and materials via **atomistic modeling, high-throughput computing, and data science.**
- **Collaborated with team members** in multidisciplinary research groups.
- **Published peer-reviewed journal articles** concerning research findings.

Contact : Marat Valiev - marat.valiev@pnnl.gov

EDUCATION

PhD, Materials Science & Engineering
University of California Riverside

09/2015 - 09/2020

BS, Applied Mathematics
University of California Riverside

09/2011 - 06/2015

RELEVANT PUBLICATIONS

Invited manuscript

Evaluation of GlassNet for physics-informed machine learning of glass stability and glass-forming ability
2024, Submitted to the Journal of the American Ceramic Society
A pre-print is available on arXiv: https://doi.org/10.48550/arXiv.2403.10682

Research article

A case study of multimodal, multi-institutional data management for the combinatorial materials science community
2024, Submitted to Integrating Materials and Manufacturing Innovation
A pre-print is available on arXiv: https://doi.org/10.48550/arXiv.2311.10205