Suliman Sharif

Website: www.sulstice.dev **Github:** https://github.com/Sulstice/ **Email**: sharifsuliman1@gmail.com

B.Sc. Biochemistry Minor Computer Science, University of Texas at Austin **Austin, TX**
M.Sc. Organic Chemistry, University of California, Riverside **Riverside, CA**
Ph.D. Candidate Pharmaceutical Sciences, University of Maryland, School of Pharmacy **Baltimore, MD**

INDUSTRY EXPERIENCE

L7 Informatics **Austin, TX**
Bioinformatics Scientist/Lead QA Engineer/Lead Scientist/Junior Devops Engineer *July 2017–Aug 2020*

- Automated scientific workflows for various industries (ex. Gene and Cell Therapy, Sample Barcoding, Fume Hood Real-Time Data Analysis) along the drug pipeline with 21 CFR part 11 Compliance, Managed a team of 8 Application Scientists, and 2 Developers..
- Raised Series A (10 Employees), Series B (62 Employees), and after my departure they have raised Series C (150+ Employees).
- Python, Vagrant, VueJS, Jenkins, Cypress, Azure, Terraform, Docker, GraphQL, Jira, PostGresSQL, Zendesk, Git

Macromoltek **Austin, TX**
Software Engineering Intern *May 2016–Aug 2016*

- Developed a protein viewer for antibody analysis and modification tools for their customer web portal.
- BiasMV, JQuery, GruntJS, RequireJS, Turbogears, SVN, WebGL

MD Anderson Cancer Center **Houston, TX**
Medicinal Chemist Intern *May 2015–Aug 2015*

- Modified existing potential therapeutics to improve liver clearance for bromodomain receptors.
- NMR 600 MHz with Robot Arm, HPLC, Mass Direct, Autocolumns, Liver Enzyme Analysis.

ACADEMIC EXPERIENCE

MacKerell Group, University of Maryland School of Pharmacy **Baltimore, MD**
Ph.D. Candidate *Aug 2020– Est. June 2023*

- Thesis Title: Optimizing the Off-Diagonal Terms of the Lennard-Jones Parameters in the Empirical Force Fields.
- Python, Plotly, AWS, Psi4, CHARMM, Fortran, Git, Stampede2, XSEDE, SLURM, Github, Neo4j, Graph Databases

Humphrey Group, University of Texas at Austin **Austin, TX**
Undergraduate Student Researcher *Apr 2015– Aug. 2016*

- Designed and Performed Docking Studies on Metal Organic Frameworks with Biphenyl Cages
- NMR 600 MHz, Power Pattern, X-Ray Crystallography

May Group, University of Houston **Houston, TX**
Undergraduate Student Researcher *Jun 2014– Aug. 2014*

- Synthesized Analogues of Bisindole Compounds Biomimetically For Enhancing Biological Activity.

OPEN SOURCE EXPERIENCE

Global-Chem

- A Chemical Knowledge Graph of common small molecules and their IUPAC/SMILES/SMARTS for selection of compounds relevant to diverse chemical communities | *12K Lines, 15K Downloads Per Month*.

PUBLICATIONS

- Orr, Asuka A., et al. “Preserving the Integrity of Empirical Force Fields.” Journal of Chemical Information and Modeling, vol. 62, no. 16, Aug. 2022, pp. 3825–31.
- Sharif, Suliman. “Cocktail Shaker: An Open Source Drug Expansion and Enumeration Library for Peptides.” Journal of Open Source Software, vol. 5, no. 52, Aug. 2020, p. 1992.

CONFERENCE TALKS

- **Cocktail Shaker: A Python Package for Chemical Library Building of Peptide Combinations and Enumeration in SMILES,** *RDKit UGM 2019 Conference*, July 2020
- **CGenFF Compass: A lexical dictionary bridge between SMILES to Atom Types,** *The International Society of Quantum Biology and Pharmacology*, May 2021
- **Using Python to Build a Chemical Knowledge Graph of IUPAC to SMILES**, *PyData Global*, May 2021
- **The Common Chemical Universe**, *Graduate Student Conference University of Maryland*, Feb 2022
- **How to Select Compounds for Force Field Parametrization that are most useful to different communities**, *International Society of Biocuration*, July 2022
- **Porting Global-Chem Knowledge Graphs into Neo4j,** *Nodes22,* Upcoming Jan 2023.
- **Optimization of the Off-Diagonal Lennard-Jones Parameters in the Empirical Force Fields**, *University of Maryland,* Upcoming.

EVENTS HOSTED

- **LifeSciHack 2019 Bridging Software and Science Austin**, *Mozilla Foundation/Wework*, Feb 2019
- **LifeSciHack 2019 Bridging Software and Science London,** *MozFest,* Oct 2019