Shaun J. Rose

Monterey, CA

LinkedIn: *www.linkedin.com/in/shaun-rose-a88752231/*
Github: *http://github.com/thefrznrose*
Email: *shaunrose831@gmail.com*
Phone: *831-710-8120*

WORK EXPERIENCE AND PROJECTS:

California State University - Monterey Bay   **August 2023 - December 2024**
Teaching Assistant (Computer Architecture, Computer Networks)   *Seaside, CA*

- *Transformed course assignments to improve accessibility, received the most impactful TA award for Fall 2024.*
- *Instructed approximately 120 students in 4 courses on computer architecture and networks networking fundamentals, including CPU design, Linux mini-networks, DNS, TCP/UDP, HTTP, & Python socket programming.*

RNA 3D Structure Lab   **November 2023 - Present**
Lab Assistant Manager & Undergraduate Researcher   *Seaside, CA*

- *Led a team of approximately 10 students to develop RNA structure classification tools, created software documentation, authored research, created Next.js frontends, and designed entity relationship database schemas.*

Benchmark Dataset for RNA Motif Base Pair Annotations   **August 2024 - Present**
Author, Programmer   *Seaside, CA*

- Won 3rd place at 2024 CSUMB Undergraduate Research Symposium.
- Created RNA base pair annotation tool benchmarks using Jupyter Lab by merging annotations from CLARNA, FR3D, MC Annotate, DSSR, RNAVIew, & RNA Motif Atlas to develop a consensus.

RNAnnotations   **November 2023 - Present**
Designer, Front End Developer   *Seaside, CA*

- *Awarded $4,000 in scholarships to present at SACNAS and GMIS conferences in 2024.*
- *Created an RNA structural motif annotation tool for professional RNA researchers, using Next.js & THREE.js.*

DisceRNA Citizen Science Game   **November 2023 - Present**
Designer, Front End Developer   *Seaside, CA*

- Co-designed a citizen science game platform for manual analysis of RNA tertiary structural motifs; implemented the frontend with Next.js (TypeScript) & THREE.js for graphics.

Code Oriented Oral Exam Manager   **January 2024 - Present**
Designer, Front End Developer   *Seaside, CA*

- Built a full-stack web application using Next.js, Express.js, & MYSQL to automate code-oriented oral exams to enable instructors to effectively test students' knowledge of coding assignments.

Big Sur Land Trust Fire Recovery Monitoring Web Service   **January 2024 - Present**
Designer, Full Stack Developer   *Seaside, CA*

- Designed & implemented a citizen science web service using Next.js, Express.js, Moviepy, & FFmpeg to enable Big Sur Land Trust to monitor forest fire recovery in the Mittledorf preserve.

EDUCATION

California State University Monterey Bay   **January 2024 - Present**
B.S. Computer Science, Concentration in Software Engineering   *Seaside, CA*

- 3.665 GPA, Dean's List FA22+SP23+FA23+SP24,

SKILLS

- Programming Languages
  - Python, JavaScript, TypeScript, Java, C++, C, MySQL
- Frameworks / Tools
  - Next.js, React, Express.js, RESTful APIs, Git/GitHub, Linux, Software Engineering, Project Management, TCP/UDP, DNS, HTTP, Virtual Machines, Teaching