## Diana Issatayeva

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**♦** EDUCATION

UC San Diego BS: Computer Science GPA: 3.69 Dec 2021

## 

To facilitate research in AI safety. In the past 3+ years, I have worked in high-velocity teams with rigorous test-driven development culture. I now seek to apply acquired software development skills to neglected important problems.

## \* EXPERIENCE

Sr. Software Engineer - DNS Infrastructure LinkedIn Jan 2024 - Present

- Developed a DNS client to provide observability for all DNS requests across 400K+ hosts. It enabled effective DNS infra alerting and opened up security analysis projects.
- Broke down regulations to code and processes, as I translated DNS RFC compliance requirements into tests and testable specs within CI/CD pipeline.
- •Used system profiling tools to ensure the process meets sub-millisecond latency and strict CPU, and memory utilization limits.
- See our blog post for more details: <a href="https://www.linkedin.com/blog/engineering/">https://www.linkedin.com/blog/engineering/</a> infrastructure/building-a-resilient-dns-client-for-web-scale-infrastructure.

Software Engineer - Traffic Engineering LinkedIn Feb 2022 - Dec 2023

- Maintained a Software Defined Network controller, that managed 50 backbone devices.
- Expanded configuration management component to provide drift detection service, and a high-level interface for operators to manipulate the network topology.
- Developed judgment in choosing the right scope for tests from single-host, single-process to full multi-process, hardware-integrated scenarios.
- Developed techniques to progressively prototype features with minimal overhead. Unit tested with mocked RPC interfaces and device dependencies. Containerized 20+ microservices to run integration tests on a single development host. And configured physical test labs with real devices and traffic generators to run end-to-end tests.

## *✓* **ADDITIONAL EXPERIENCE**

Research Assistant - WiFire San Diego Supercomputer Center Apr 2019 - Mar 2020

- Reduced operational load for researchers through infrastructure abstraction.
- Built a user-facing interface to specify parameters and dynamically containerize + deploy ML workloads.

Project Lead - FlapJS WebApp https://github.com/flapjs/webapp
Jan 2020 - Dec 2021

- Led team of 6 to develop automata analysis tools used by 50+ students per term.
- Converted research protocols into software and infrastructure: recruited participants, wrote test scripts, and managed data collection and analysis.

Computer Science Tutor UC San Diego

2019-2021 (3 terms)

- Taught Discrete Math, Data Structures, and Software Engineering classes.
- Collaborated with the instructional team to coordinate a class of 200+ students.
- Led discussion sections, resolved student misconceptions, designed examples to demonstrate abstract concepts, and assessed homework.