Dylan Estrada

dylanestrada.com · linkedin.com/in/dylanestrada · dylante2021@gmail.com · 847-477-2972

Work Experience

Aurora Innovation

Software Engineer I/II — Nov 2021 - Present

- Received company-wide award for quickly designing and implementing Perception's large-scale Continuous V&V process leading to perfect pipeline health and 50% reduction in runtime from previous process
- Designed tool to track, visualize, and link to recent PRs which impacted Perception's performance increasing change visibility and reducing regression triage time by over 90%
- Created Buildkite pipeline with daily/weekly comparisons of Perception performance with notifications of statistically significant regressed metrics sent to DRIs with a TP rate >.99
- Curated new test dataset by coordinating with teams across Perception to narrow in on ODD, reducing dataset size by 30% while increasing signal in nominal and long-tail cases
- Horizontally distributed key portions of the metrics pipeline, leading to a 300-minute speed-up of gating jobs and increasing developer velocity

Software Engineering Intern — May 2021 - Aug 2021

- Designed issueset structure and API which allowed users to create batches of label issues and submit them for relabeling, reducing turn-around time by 50%
- Performed label service database maintenance, updates, and created documentation of team processes for future users

Caesar Research Group

Undergraduate Researcher — Aug 2020 - May 2021

- Created low-latency, multi-user, Kafka based TCP server to allow for multithreaded communication between backend database, backend emulation, and frontend server
- Redesigned APIs between Unity VR project and cloud network, reducing latency by over 30%

Kohl's Technology

Software Engineering Intern — June 2020 - Aug 2020

- Developed Jenkins pipelines using Kubernetes, Ansible, and Docker to improve CI/CD operations reducing job runtime by 25%
- Updated network to help internal customers easily view allocated network space reducing related tickets by 95%

Education

University of Illinois at Urbana-Champaign — Champaign, IL
Bachelor of Science in Computer Engineering — Aug 2017 - May 2021

Skills

Programming Languages:	Python, C++, C, SQL, x86 Assembly, System Verilog
Technologies:	AWS, Buildkite, PostgreSQL, PyTorch, Pandas, Docker, Kafka, git

Project Highlights

Unix Operating System *C, x86 Assembly*

Programmed core functionality of custom Operating System with a team of 2 others. Functionality included processes, threads, scheduling, a file system, virtual memory, and multiple terminals.