Dung Le

✆ (585) 775 1777
✉ dle8@u.rochester.edu
🖥 dle8.github.io
⚙ github.com/dle8

Technical Skills

Languages: C/C++, Python, Java, PHP, SQL, HTML, JavaScript.
Technologies: Git, Spring, Docker, React, Cassandra, NGINX, GraphQL, Redis, Flask, Memcached, RabbitMQ.
Experiences: C/C++ concurrency, OpenMP, MPI, Linux kernel.

Experiences

Amazon Web Services, *Software Engineer Intern*   *May 2020 - Aug. 2020*

Got It, Inc, *Software Engineer Intern*   *May 2019 - Aug. 2019*
- Worked on Got It's Excel Chat website and **Flask**/**SQLAlchemy** backend, serving 1M+ users.
- Designed and led the development of an CI/CD tool using **AWS Python SDK**, **Github API**, **Google Oauth 2.0**, and **Python** to improve CI/CD workflows in **AWS CodePipeline** by **1.5x**.
- Created an **Memcached** in-memory data storefront to reduce repetitive resource-intensive API calls.
- Implemented new UI tests with **Selenium** and refactored Pytest unit testing framework.

ELCOM, *Software Engineer Intern*   *May 2018 - Aug. 2018*
- Created a digital documents router in **Python** to reduce document processing time from **1 day to 2 hours**.
- Implemented routing and waiting of approval timeline for simpler tracking.
- Increased code quality and facilitated code reuse/modification by refactoring Python codebase.

Awards & Honors

1ˢᵗ place (out of 1745 participants): *HackerRank: Hack the Interview II, US*   *C++*
24ᵗʰ National (out of 500 university teams): *ACM - ICPC North America Championships 2020*   *C++*
6ᵗʰ place (out of 20 university teams): *ACM - ICPC Northeast Regional Contest 2019*   *C++*
1ˢᵗ place (out of 30 participants): *Google Tech Challenge 2019*   *C++*

Projects

Adyio, *Web Services*   *Mar. 2019 - Mar. 2020*
- Designed and implemented backend of a website in **PHP** to find gaming duos based on personal preferences.
- Preserved high-resolution media contents with **Dropbox API**, serving **1500** active accounts.

Kronos, *Web Services*   *Nov. 2019 - Now*
- Built an website using **Google Search API** to fetch related news/articles that links to stock price changes.
- Implemented **GraphQL API** with **Graphene Python**, and then deployed using **Docker**.
- Used **Cassandra** as articles and stock price snapshots storage for low latency data access with denormalization.

MPI Profiler, *Parallel Computing*   *Mar. 2020*
- Created a **C++** static library for fine-grain profiling of MPI programs with high-resolution timer.
- Profiled each MPI routine and CPU time of each process with millisecond precision.

Distributed File System, *Distributed Systems*   *Dec. 2019 - Mar. 2020*
- Built a Distributed File System modeled on Facebook's Haystack paper to store and retrieve images.
- Used **NGINX** as a load balancer to distribute client requests to **Node.js** servers.
- Implemented multiple Haystack Stores with **Cassandra** and Cache servers with **Redis**.

EZPing, *Web Services & Distributed Systems*   *Oct. 2019 - Jan. 2020*
- Used **Java**, **Spring**, and **Docker** to build a scalable real-time chat app with multi-node architecture.
- Scaled application horizontally with **RabbitMQ** to handle multi-node users' subscriptions.
- Mirrored distributed storage with **Cassandra** in 6 LAN-connected computers for high writes performance.

CP-Notebook, *Algorithms*   *Oct. 2018 - Now*
- Created a notebook of reusable code for data structures, algorithms, and adhoc problems implementations.
- Other topics include number theories, combinatorics, and geometry.

Education

Bachelor of Science in Computer Science, *University of Rochester*   *Expected Dec. 2021*
Major GPA: 3.82/4.00
Courses: Parallel & Distributed Systems, Computer Vision, Computer Organization, Database Systems, Design & Analysis Algorithms, Computational Statistics, Web Programming, Data Structures & Algorithms.