Daniel Mikhail

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mikhaidn.github.io/Plokmin

Education

2020 - 2024 Masters of Computer Science; University of Illinois at Urbana-Champaign

2014 - 2018 BSc, Computer Science; Rose-Hulman Institute of Technology (*Terre Haute, IN*)

Experience

2018 - 2021 Software Production/Development Engineer at Yahoo Inc. (Champaign, IL)

Served as the contact point for developers and customers alike for components of Yahoo's DSP advertisement pipeline (Hadoop and AWS)

- Communicate blockers to producers and customers of our data, while also developing solutions
 to minimize their impact (e.g. Safely updating VMs impacted by OS-level vulnerabilities, create
 Oozie jobs to reprocess select timestamps, etc.)
- Supplemented newer Production Engineers' training with informal tribal knowledge lessons on Linux and Hadoop speeding up "on-call" readiness by about a month
- Increased the error detection rate by 10x on a new set of pipelines through a web-app that presented aggregated status checks (Django(Python), Celery, Kafka)

2016 - 2018 Resident Assistant at Rose-Hulman Institute of Technology (*Terre Haute, IN*)

Resident Assistant of the Year (2016-17)

Side Projects

Details of everything listed below can be found at mikhaidn.github.io/Plokmin

Open Source Research

Increased the documented search space of two integer sequences by 1000x with the help of bitmapping, multithreading, and memoization (A100570 and A241922 on the OEIS)

Knowledge Dumps

Beginner-friendly guides I've made over the past year, inspired by some FAQs

Topics include: (French) Macarons, The Unix Shell, and STEM College Prep.

Skills

- Web Development: Django(Python), MySQL, JavaScript
- · Unix Admin: Networking, Bash Scripting, Data and Key Management
- **DevOps**: Containers (Docker), CI/CD (Jenkins)
- Scientific Computing: MATLAB, R, SciPy (Python)
- Cloud and Distributed Systems: Hadoop (Oozie, HBase, Pig, Spark), AWS (EC2, S3, Redshift, KMS)