

## Linus Kipkoech

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### EDUCATION

**University of California, Berkeley** – Berkeley, CA

December 2018

Bachelor of Science, Electrical Engineering and Computer Science (EECS)

#### Relevant coursework:

- Structure and Interpretation of Computer Programs
  - Data Structures and Advanced Programming & Algorithms
  - Computer Security
  - Operating System and System Programming
  - Intro to Databases
  - Great Ideas in Computer Architecture – Machine Structures
  - Microelectronic Devices and Circuits
  - Designing Information Devices and Systems I & II
  - Micro Fabrication Technologies
  - Discrete Mathematics and Probability Theory
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### RELEVANT SKILLS

**Programming:** Python, Java, C, Golang, HTML, CSS, SQL, Elastic Search, Assembly Programming and Swift

**Other:** Web design, iOS Development, TCP/IP, Unix/Linux administration

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### EXPERIENCE

**Software Engineering Intern** | Walmart Labs

June – August 2017

- Used Elastic Stack to collect data, parse, analyze and create visualizations
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- Used Logstash with JDBC to pull the data from an oracle database into the Elastic search then indexed the data and created dashboards corresponding to an SQL query ran as part of Log stash input.
- Used Linux configurations like Cron scheduling to schedule SQL jobs to be executed during low traffic hours to minimize the impact on the production.
- Deployed the project to Oneops (Walmart's cloud service)

**Linux /IT Assistant** | California Statewide Database & Election Administration Research Center

January 2018 – now

- Works with IT environments consisting of various Linux servers and cloud based website and server. Assisted in migrating a local server to Amazon Web Services EC2
- Provides Linux support to staff and manages all the machines used in the office. Also assisted in implementation of a new website.
- Collaborates with a team of more than five people to design a road map technology and infrastructure of the organization.

**Student Assistant** | Berkeley International Office

May – Aug 2016

- Worked SEVIS Coordinator in updating and managing international students' data on a daily basis. Also served as front-desk customer service giving feedback and scheduling appointments for the clients.
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### LEADERSHIP

**LeaderShape Institute**

January 2016

- Trained to lead with integrity in the face of challenges, while implementing a value-driven vision.
  - Navigated team dynamics throughout the six-day immersive program with fellow UC Berkeley engineering students
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### COURSE PROJECTS

- Wrote the backend of a web mapping application using Java that loads XML and images from Open Street Map and renders the maps in a browser. Implemented the image rastering using Quad tree which, allowed for zooming in and out. Implement A star algorithm to determine shortest paths between two points on a map.
  - Investigated multiple aspects of the Great Firewall of China by examining and crafting raw network traffic and sending TCP packets that would normally trigger the firewall. I sent a sequence of packets so that the Great Firewall does NOT censor the request but the server will reassemble the request uncensored.
  - Built a version control system, which mimics some of the basic features of popular version-control system Git.
  - Implemented a cryptographically authenticated and secure file store using Golang.
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