Hamza Baig

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LANGUAGES

Comfortable in:
Python • Go • Dockerfile • Bash
• Powershell • C • Javascript
Familiar with:
Groovy • SQL

TOOLS

Comfortable in:
AWS S3/EC2 • Elasticsearch • Docker
Kubernetes • Prometheus • Grafana
Helm • Snowplow • Jenkins
Datadog • Git
Familiar with:
Terraform • Puppet
Ingress • Alertmanager • Airflow

COURSEWORK

COURSERA
Google Cloud Platform
• SRE: Measuring and Managing
  Reliability

New York Institute of Finance
• Introduction to Trading,
  Machine Learning & GCP

UNIVERSITY OF WATERLOO
BASc. Computer Engineering 2022
• Data Structures and Algorithms
• Systems Programming and Concurrency
• Discrete Mathematics I & II

EXTRACURRICULARS

• Mentor at ENGHacks 2019
• First-year mentor for ECE Class of '23
• Elections Officer for ECE Society
  (Spring '19)

SOCIALS

: in/mhabaig/
: baighamza
: www.hamzais.me

EXPERIENCE

THE GLOBE AND MAIL | SRE (DevOps) Intern - Sophi.io
January 2020 - April 2020 | Toronto, ON
• Updated and deployed **Helm Charts** for **ingress** controllers and internal tools
  used by the development team for both staging and production environments
• Deployed an alerting system for monitoring API endpoints and disk usage from
  Elasticsearch using **Grafana** and **PromQL**
• Collaborated extensively with offshore team members in implementing **Jenkins**
  files for CI/CD pipelines used by multiple repositories within the organization
• Implemented a feature that reduced time taken for **Keel** deployments to finish
  from hours to a couple of seconds by reallocating the resources needed to
  deploy the clusters

WATONOMOUS | Team Lead - Telemetry Subdivision
August 2019 - December 2019 | Waterloo, ON
• Lead a team of 5 students to monitor an autonomous vehicle's vitals like battery
  health and steering from the CAN interface using **Python** and **Bash**
• Drafted and finalized team's retrospectives and OKRs for both spring and fall
  2019 terms.

TEXTNOW | Backend SRE Intern
May 2019 - August 2019 | Waterloo, ON
• Worked with open-sourced platforms (Grafana), in **Javascript** to implement a
  "Group-by" option for analyzing metrics from **DataDog**
• Developed an alerting system utilizing Slack API that constantly monitors
  incoming messages alerting users if a metric limit has been reached
• Prevented **Puppet** runs from crashing repeatedly on production environments
  by patching a fix that increases the memory needed to run

COMMUNICATIONS RESEARCH CENTRE | Cloud Intern
September 2018 - December 2018 | Ottawa, ON
• Used **AWS** and **Azure** to develop and automate a program that determined idle
  virtual machines from active ones
• Designed and implemented the program in **Python** and PowerShell, with data
  being stored in **Amazon S3** buckets and curated using **SQL**

PROJECTS

GOMPILE Go
• Developing compiler for a fictional language in **Go**
• Project consists of two parts, a lexer and tokenizer both being used to
  recognize and organize the different characters of the language

CAT CLASSIFIER </> Kubernetes, Docker
• Used Tensorflow serving components to run in a **Docker** container
• Project was deployed in **Kubernetes** to classify images of cats