

Amine Chikhaoui

<https://chikhaoui.org/>

Email : amine@chikhaoui.org

Phone: +1-678-938-4882

PROGRAMMING SKILLS

- **Languages:** Python, Java, a bit of C/C++, Nix expression language, sh/bash, SQL
- **Programs/Systems:** AWS/EC2/S3, GCE, Systemd, Git/Mercurial, Vim
- **Operating Systems:** Linux/NixOS, Darwin/MacOS

PUBLIC WORK

Github profile: <https://github.com/AmineChikhaoui>

Contributor to some of the open-source projects that are part of the **NixOS** organization.

I'm also part of the NixOS infrastructure team that support the nixos.org website and the hydra.nixos.org build farm.

EXPERIENCE

- **Logicblox/Infor Retail** Tunisia - Atlanta, GA
Software Engineer *Aug 2015 - Present*

I started as an application developer at Predictix/Logicblox, a ~ 100-person startup. The company was acquired by Infor in June 2016.

- **Logicblox Database Team** Feb 2018 - present (Atlanta, GA)

- * Working on a project that aims to use the AWS S3 infinite storage as a storage backend for the Logicblox Database pages.
 - Setting up the Nix based tests/benchmarks infrastructure.
 - Performance troubleshooting and bug fixes of the existent implementation.

- **DevOps Team** Apr 2017 - Feb 2018 (Tunis)

- * **LB-Jobs:** LB-jobs is our internal highly distributed job scheduler designed for running concurrent Logicblox based batch jobs. It uses AWS/GCE ephemeral instances (EC2 spot instances/GCE preemptible vms), SQS queues and a set of Logicblox web-handlers/database. The jobs achieve reproducibility and isolation using Nix builds under the hood.
 - Managing the deployment/monitoring of the cluster.
 - Feature development and application support.

Languages/Tools: Java/Nix/LogiQL/Protobuf, AWS/GCE, NixOS/NixOps.

- * **Nix/NixOS/NixOps:** Contributor to the open source projects Nix/NixOS/NixOps which we use for package management and deployments. Help application teams write build/deployment expressions using the Nix expression language and factor out the common bits and pieces into generic expressions that are used across all projects.
- * **Build farm:** Managing the Hydra based build farm which consists of a set of Hetzner machines, MacOS builders and EC2 spot instances for dynamic scaling.

- **Application Developer** Aug 2015 - Apr 2017 (Tunis)

- * Work on the back-end of one of our major Forecast and Replenishment projects (US top 5 retailers)
 - Write batch processes in Logicblox's workflow DSL.
 - Design and implement services for importing and exporting raw client data using the Logicblox's platform.
 - Both production and development deployments using Nix* tools on top of AWS resources.
- * Worked also on production support of the same application:

- Manage the production cluster of +40 nodes deployed in AWS EC2 using NixOps/NixOS.
- Improve monitoring and metrics collection.
- Improve system and batch performance, including application database tuning and system performance troubleshooting.

EDUCATION

- **National School of Computer Science** Mannouba, Tunisia
Focus: Networks and Distributed Systems *Sep. 2012 – May. 2015*
- **Preparatory Institute for Engineering Studies of Tunis** Tunis, Tunisia
Intensive courses in advanced Mathematics, Physics and Chemistry. *Sep. 2010 – June. 2012*
*Ranking in the National Exam for the Entry to Engineering Schools: **183/4000***