Saalik HATIA

Distributed Systems Engineer

75009 Paris
📱 *00 33 6 25 49 61 59*
saalik.hatia@outlook.com
in *www.linkedin.com/in/saalik-hatia/*
French

Skills

General Skills
Distributed systems
Consistency protocols
Concurrent programming
Data replication
Formal specification
Transactionnal systems
Storage systems
CRDTs
Database design and architecture
Object Oriented Programming
Algorithms

Tools
NoSQL
RocksDB
FoundationDB
PostgreSQL
Kafka
Redis
Docker
Git
UNIX environnement

Languages
Java
Scala
Go
C
Bash
Python

Speaking
French - Native
English - Fluent

Experience

2018-2023   **PhD Researcher**, *LIP6, Sorbonne Université (UPMC) - INRIA*, Paris
- **Thesis**: **Leveraging formal specification to implement a database backend** https://www.theses.fr/s267382
- **Wrote multiple PoC databases**. Wrote with our team **transactionnal** consistency semantics for databases to build correct database backends. Performed consistency benchmarks and performance evaluation.
- Collaborated on two projects involving **industry partners and research labs**. The first one is a european project called **Lightkone (H2020)** and the section one is an ANR project called **RainbowFS**.
- **Collaborated with Scality** in the scope the **ANR RainbowFS** to work on having a converging distributed FS without locks on a Main-Main configuration
- Did a state of the art on **replication** and **consistency** protocols in **distributed** systems, DB backends, CRDTs
- Work and contribution on the **open source research database AntidoteDB** architecture to reduce consistency issues
- **Tech Report**: **Specification of a Transactionally and Causally-Consistent (TCC) database** https://hal.science/hal-02902474v2
- **Publication**: Models for Storage in Database Backends https://arxiv.org/abs/2403.11716

2018-2022   **CS Teacher**, *LIP6, Sorbonne Université (UPMC) - INRIA*, Paris
- Concurrent Programming (Java)
- Object Oriented Programming (Java)
- Operating systems and shell (Bash, Linux)

2018 **(6 months)**   **Master Research Intern**, *LIP6, Sorbonne Université (UPMC) - INRIA*, Paris
Worked on a new recovery algorithm from the log and safe pruning of the log. I studied the AntidoteDB log and materializer.

2015-2016   **Product Manager**, *ookee (Shutdown)*, Paris
ookee was an Android smartphone startup building a product for senior users. Product manager of services, from business development to vulgarization to designing the products.

Education

2023   **PhD in Distributed systems**, *LIP6, Sorbonne Université (UPMC) - INRIA*

2018   **Master in CS, Systems and Distributed Applications (SAR)**, *UPMC*, Paris
Design and development of distributed, parallel, large scale systems and applications.

Hobbies

Cycling, Cooking, Technology, Machine architecture