Borja de Régil

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github.com/ergl

I am interested in writing fast and correct distributed systems.

Areas of Interest

Distributed Systems
Databases
Conflict-Free Replicated Data Types (CRDTs)

Skills

Erlang, Bash, Javascript (Node) *(Professional Experience)*
C, Java, Python, Pony *(Fluent)*
OCaml, Clojure, R *(Familiar)*

Previous Experience

Imdea Software Institute
Distributed systems programmer
June 2020—Current

Imdea Software Institute
Research Intern
October 2016—May 2020

> Implemented and evaluated a new transactional protocol for strongly consistent distributed databases; implemented a relational (SQL) model adapter for key-value distributed storage; tested distributed programs via property checking (model checking); implemented an open-source library for batching and multiplexing TCP connections, which allowed to scale systems to handle up to 2.5 times more requests per second. The work was funded by an ERC grant *A Rigorous Approach to Consistency in Cloud Databases*.

Google Summer of Code
Alumni
Summer 2016

Improved run-time performance of the Lasp programming language by applying deforestation techniques and control flow analysis.

H4ckademy Programming School
Alumni
Summer 2015

Co-designed and implemented a domain-specific language in Python that would let users write unit test against streaming APIs.

Publications

Conference

Manuel Bravo, Alexey Gotsman, Borja de Régil and Hengfeng Wei, *UniStore: A fault-tolerant marriage of causal and strong consistency.* USENIX ATC '21 (to appear).

Workshop

Borja de Régil, Christopher Meiklejohn, *Dynamic Path Contraction for Distributed, Dynamic Dataflow Languages.* AGERE 2016. http://arxiv.org/abs/1609.01068

Education

B.S. in Computer Science
Complutense University of Madrid, Madrid
Class of 2020

Languages

Spanish (Native)
English (Full professional proficiency)