# Jaseem Abid

blog.jabid.in

# Work Experience

04/22 - 11/22 **Senior Software Engineer**, *Twitter*, London, UK.

Search and Recommendations. Productionising ML models and Approximate Nearest Neighbour search of dense vectors.

08/20 - 03/22 Senior Site Reliability Engineer, Apple, London, UK.

Traffic SRE responsible for L4/L7 load balancing and transparent e2e encryption at immense scale. Built tools to improve deployment velocity, observability for customers and alerting & monitoring for the entire stack.

10/18 - 07/20 **SRE/Platform Engineer**, *Monzo*, London, UK.

Worked with a small team responsible for Site Reliability and Infrastructure for a major UK bank with over 4M current accounts.

Maintained a modern infrastructure platform that run over 1600 micro services on Kubernetes & AWS along with etcd, Prometheus, Cassandra etc. Maintained several shared libraries, was primary on call and helped other engineers make the best out of the platform.

Comfortable working with complex distributed systems, decentralized databases, consensus protocols and AWS.

05/17 - 08/17 Recurse Center, NYC, https://recurse.com.

Attended a 3 month self directed, community driven educational residential retreat for programmers. I worked on several projects including a compiler for a small programming language targeting LLVM and micro benchmarking machine code. I learned x86 assembly, Rust and the nuances of linkers and operating systems.

https://blog.jabid.in/2017/08/10/rc.html

10/15 - 09/16 Platform Engineer, Fybr, Bangalore, IN, https://fybr-tech.com.

Developed a distributed stream processing framework in Erlang for an IoT platform. Streams and workers were distributed among a cluster of nodes, with focus on fault tolerance and consistency. I played a key role in the architecture of the platform and implemented the necessary distributed consensus algorithms (RAFT).

02/14 - 09/15 **Software Engineer**, *Ideadevice*, Bangalore, IN, https://ideadevice.com.

Developed mission critical automation suite used by some of the largest financial institutions of India. Built the automation engine, various backend services and user interfaces.

07/13 - 02/14 Freelance developer, Bangalore, IN.

### Education

04/09 - 06/13 Bachelor of Technology in CSE, National Institute of Technology, Calicut.

# Relevant Projects

Incremental An educational scheme compiler built with strong focus on learning, testing and experimentation. The single pass compiler written in Rust can compile a small subset of Scheme into x86 assembly.

https://github.com/jaseemabid/inc

Olifant A compiler for a lambda calculus like language targeting LLVM IR. Worked with LLVM to understand the design and implementation of a high performance IR, high level language bindings and the myriad optimizations modern compilers can do.

### Technical Skills & Areas of Interest

Programming I strongly prefer working with well typed functional languages whenever possible. languages Proficient in Haskell, Erlang & Rust. Comfortable in x86 Assembly, C, Python & Go.

Performance I enjoy making fast programs faster. Interested in working with systems with high Engineering availability & latency requirements, lower levels of abstractions and language runtimes.

Compilers Interested in making programming languages safer by eliminating runtime errors with static code analysis and advanced type systems. Implemented several small compilers and interpreters in Haskell (all the source code is available on github).

Distributed Professional experience in distributed consensus algorithms and log processing systems Systems built with Erlang as well as very large and complicated backend for a major bank with over 1600 micro services.

#### Miscellaneous

Talks An Incremental Approach to Compiler Construction, Papers we love London. https://www.youtube.com/watch?v=WBWRkUuyuE0

Organizer, A repository of academic computer science papers and a community of almost 1700 Papers we love people who loves reading them. I started a chapter and organized about 30 meetups over the last 3 years in Bangalore. http://paperswelove.org

Baja SAE India Designed and fabricated an All Terrain Vehicle for Baja SAE India 2012, an annual intercollegiate ATV design competition and secured 16th place overall out of the 250+ teams with multiple category awards. https://www.facebook.com/teamunwired