Erlend Aakre

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Summary

I'm a Software Engineer with 16 years of professional experience and enjoy the continuous learning that goes with a career in software development, as there is always a new technology, tool or problem to learn about.

Since 2016 I've been working with Scala in various flavours and I'm currently focusing on functional design and software development using FP libraries like ZIO/Cats while using best practices to write clean and functional code that is easy to maintain and test.

I'm a big advocate for TDD and tests at all levels, and I enjoy being part of an agile team with high autonomy, working together to solve problems using modern engineering principles.

For the last year, I've been working on cloud and DevOps (terraform, aws, azure, concourse, python) and working with cloud infrastructure.

Open for remote work, but hybrid work in Cambridge, UK might be considered as well.

Technical Skills

- Scala/ZIO/Cats / Typelevel stack / Akka / Play / http4s
- GIT/SBT/Gradle / RabbitMQ / ActiveMQ
- AWS / Terraform / Ansible / Python / Serverless
- Linux/ Docker / Concourse / Tomcat / Nginx
- CI/CD / ScalaTest / Cucumber / Spock / Pact / Selenium / JUnit
- PostgreSQL / DynamoDB / MongoDB / Redis / Hibernate / MySQL / Hsqldb
- Grails / Groovy / Scalatra / JSON / XML / XSLT / REST / HATEOAS /SOAP / RPC
- Functional design / Software architecture best practices
- Scrum / Kanban / XP / SOLID principles and clean code

Experience

| 2022-01 | Armakuni | Consulting Engineer, working with Infrastructure (Terraform, |
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| 2023-01 | | Python, AWS, Azure, concourse) and embedding with client teams to provide cloud upskilling, agile ways of working and fast flow of delivery (Agile, XP, Kanban, CI/CD, Team Topologies). |
| 2021-07 2021-10 | Ziverge | Senior Software Engineer, working on high-performance systems at a client with large amounts of data using Scala, ZIO, Cats. |

| 2018-07 2021-06 | Worldpay / FIS | Senior software developer working on several Scala (Cats + Play) microservices in the payments domain, creating HATEOAS REST services for card payouts, card verification and bank transfers. |
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| 2017-03 | EFS Technology | Worked with the Build-Release-Operate model and services deployed on AWS using Jenkins, Terraform, Scalyr, Splunk. Senior software developer working on the back-end of a |
| 2017-03 | | Spring/Wildfly based document management system using Java and Scala. |
| 2016-01 2017-02 | Momo group LTD | Senior software engineer, developing a highly scalable back end system for a new online banking platform using Scala, Akka, Scalatra, T24 Banking platform, and MyBatis. |
| | | Had the opportunity to learn Scala/Akkawhile working alongside very talented individuals at a Cambridge startup. Responsible for design and implementation of several of the platforms subsystems (secure messaging, server-side |
| | | translations and templating system, scheduling service). |
| 2014-01 | Cambridge | Core software developer for Cambridge Cognition, |
| 2015-06 | Cognition | developing and maintaining software systems for cognitive testing for pharmaceutical, research and healthcare clients. Used Grails, RabbitMQ and MongoDB on the back-end system and Sencha Touch / ExtJS on the client side. |
| 2013-03 | Sandbourne | Software developer at Sandbourne Systems. Development on |
| 2013-06 | Systems | eSellerPro, a system designed for automating amazon/eBay |
| | | sales for large-scale retailers. |
| | | Worked on both the rich client (Java Swing) and the back- |
| | | end system (Java). I also got to work on automating setup of |
| | | production environments, databases in Linux, as well as getting more experience with Jenkins / Maven / Artifactory, |
| | | being responsible for the build and release of the software for the internal testing department. |
| 2012-05 | Experis, | DEFA develops and sells home automation and car-heater |
| 2013-01 | consultancy at: | systems, I was brought in because of my experience with |
| | DEFA | Grails and Groovy to work on creating a brand new customer portal (Grails, HTML, CSS, and JQuery). |
| | | My previous experience with these allowed for greater |
| | | responsibility in choosing technical solutions, and I also |
| | | worked on the web service layer using Java, Groovy, JMS, |
| 2040.00 | A 1 | PostgreSQL and SOAP/Rest. |
| 2010-09 2011-12 | Adecco, | Q-free is a world-leading company in Road User Charging |
| 2011-12 | consultancy at: Q-Free | and Traffic management technology. I worked on two scrum teams as a consultant, developing the next generation of automatic toll station solutions, working both on back end systems and web-based customer portals. This was a very interesting job technology wise, as in addition to Java, it relied on learning several new technologies like Spring, |
| | | Maven, Jenkins, Camel, Grails, Groovy, and other open-source technologies. |

| | | This project also gave me a lot more responsibility as I was responsible for architecture, design and implementation of an integral part of the Q-free back office suite. The software I developed was an advanced, highly configurable JMS gateway system, which was used to connect the roadside systems(cameras, lasers, RFID readers) to the back end database systems. The JMS gateway required high reliability and supported making highly fault-tolerant multi-gateway networks of JMS queues. It was written using Java, ActiveMQ and ZeroMQ. |
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| 2010-01 2010-04 | Adecco, consultancy at: Verdande Technologies | Short consultancy work for a company that makes advanced case-based AI reasoning systems for analysing real-time data and metrics from oil drilling. I was responsible for researching and implementing 3D visualizations of oil well trajectories. |
| | | This gave me a good opportunity to work with both Swing and the Java2D API, creating custom Swing components and making a 3D engine in pure Java from scratch, as well as working with Java3D and OpenGL |
| 2008-09 2009-08 | Adecco, consultancy at: Bibsys | Bibsys is the Norwegian national university library database, having a huge ADABAS legacy database of books. I worked on creating a new and modern web portal using Java services, JavaScript and Ajax. The database system was written in NATURAL from the 70's and gave me valuable experience in working with older systems and providing new services for legacy systems. |
| 2008-02 2008-07 | Market Monitor | I worked as a software developer using Java (EJB/JBoss) to make different data and analytically services based on the company's very large SQL database of sport results and statistics. The data was used by betting companies all over the world to discover if they had bad odds on some bets, detect and prevent sure bets, and other bookmaker services. |
| 2006-10 2008-01 | Intrapoint | Worked as a Java developer, working on an EU research project called PRIME. Developing a multiplayer online game that used educational/serious gaming to explain and teach the principles of supply chain management. Our team was responsible for the game client and overall project management. We worked closely with a handful of other teams in Germany, Spain and Bulgaria. The game itself used Corba RMI for client-server communication and both the Server and Client were pure Java applications, with the client being a rich Java GUI application (SWT). |
| 2004-08 2004-12 | Norwegian University of | Worked at the university for 4 semesters while studying, mostly as a student assistant in programming and object- |
| 2005-09 2005-12 2006-01 | Science and Technology | oriented development classes. This job was a good experience as it allowed me to interact with lots of different people at varying technical levels, and helped my teaching and communication skills, which I've benefited from ever since as part of agile development teams. |
| 2006-01 | | The last semester I was working as the assistant to the |

| 2006-08 2006-11 | | professor, holding supplementary lectures for students in the class "Programming, advanced course", requiring me to create course material and examples, programming exercises and manage the 6-7 Student assistants, and about 80 students. As part of me being responsible for all the papers and assignments, I developed a web portal using Java/JSP/Servlets/PostgreSQL, allowing students to log in and hand in assignments and student assistants to approve the assignments for their assigned students. |
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| 2004-06 2004-08 2005-06 2005-08 | Uninett | Summer job while attending university. For two summers I worked full time for 2 months as a developer on a new solution for the Norwegian Central College Portal, using Apache Cocoon and XSLT/XML to provide document handling for student registration, transfers, grading and other functions for the portal. Also used Java (JSP and Servlets). |

Education

| Date | Education | School |
|-----------|------------------------------------|---------------------------------|
| 2003-2006 | Bachelor's degree, Information | Norwegian University of Science |
| | Technology (second and third year) | and Technology (NTNU) |
| 2002-2003 | Bachelor's degree, Information | Nesna University College |
| | Technology (first year) | |

Certifications

| Date | Issuer | Title |
|------------|-----------------------|--|
| 2001-06-18 | Sun Microsystems Inc. | Certified Programmer for the Java2 platform. |

Personal interests

Sailing, travelling, science, astronomy, science fiction, computer/board/roleplaying games. Home automation and electronics.