

# Intern with Graal Cloud Service!

Are you looking for an exciting internship opportunity? If so, this might be the perfect fit for you. The Graal Cloud Service team within the Oracle Database org has an opening for an internship to <general goal of the project>!

## **Oracle**

Oracle, a global provider of enterprise cloud computing, is empowering businesses of all sizes on their journey of digital transformation. Oracle Cloud provides leading-edge capabilities in software as a service, platform as a service, infrastructure as a service, and data as a service.

Oracle's application suites, platforms, and infrastructure leverage both the latest technologies and emerging ones – including artificial intelligence, machine learning, blockchain, and Internet of Things – in ways that create business differentiation and advantage for customers. Continued technological advances are always on the horizon.

## **Graal Cloud Service**

Graal Cloud Service (GCS) uses GraalVM Native Image, a technology that compiles Java code ahead-of-time into a standalone executable. The service also utilizes GraalOS, a new virtualization platform built on modern hardware features such as control-flow integrity and in-process memory protection. Through advanced compilation techniques, GraalOS isolates the execution of untrusted code, enhancing security.

## Internship Details

The aim of these projects is to expand GCS with innovative new features. Several research and development topics are available, tailored to the candidate's skills and interests.

### Scalable Job scheduler for Graal Cloud platform

A serverless platform must scale rapidly with fluctuating customer traffic while remaining cost-efficient. In this internship, you will investigate and improve key scalability mechanisms of the platform, including (but not limited to) horizontal scaling, workload placement, request scheduling, and concurrency management. You will explore novel approaches, implement platform-level logic and design, run, and analyze experiments to make data-driven recommendations that optimize performance, reliability, and cost.

### Secure Sandboxes for Agent Code Execution on GraalOS

As AI agents become more capable of generating Python code, A key challenge is the safe execution of AI generated code at scale. This internship will experiment creating a sandbox abstraction API to CRUD isolated sandboxes on Graal Cloud Service, execute AI-generated Python code, and manage sandbox files/artifacts/output. The project will also integrate GraalOS with LangChain or oracle's agent-spec/wayflow so agents can transparently route code execution to GraalOS-managed sandboxes with enforced resource limits, auditing, and automated cleanup.

### Database 1<sup>st</sup> party applications

This internship focuses on building support for database 1<sup>st</sup> party applications such as Oracle Database APIs for Mongo DB and Dynamo DB on Graal Cloud Service. The project will define a database 1<sup>st</sup> party application blueprint that leverages fast cold-start and resource efficiency, application lifecycle, and DB connection management. Using this blueprint, the intern will migrate DB 1<sup>st</sup> party apps to GraalVM native-image applications and run them on GCS. The project will also explore application throughput with database capacity during scaling and failover events. A reference database application will be built and evaluated to demonstrate measurable improvements in performance and operational stability.

## Required Skills

The person stepping into this role is expected to complete the internship using a wide and diverse set of skills.

- Java programming skills; other program languages like Rust and C++ are a plus;
- Good understanding of operating systems, distributed systems, and cloud technologies;
- Basic understanding of parallel computing and compilers (having completed relevant courses is a plus);

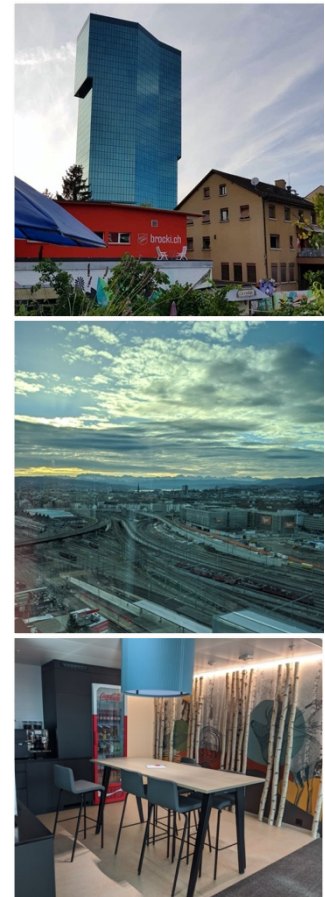


Image Caption 1. Our beautiful offices at Prime Tower in Zurich.

My internship at Oracle gave me the chance to work on a challenging research topic grounded in the industry needs. Throughout my internship, my supervisors were present to help and guide me while giving me enough freedom to explore my own ideas. Additionally, I had the opportunity to meet and interact with employees with

- Experience with full stack development, REST-ful architecture, web server frameworks (e.g., Spring Boot) is a plus

The duration of the internship can vary based on the candidate's constraints. The usual duration is 6 months. We pay a competitive salary. The research topics listed are informative, we are open to suggestions depending on your skills and qualifications. By sending in your application, you opt-in for processing your personal information.

If this sounds like you, we hope to meet you!

### How to Apply

After reviewing the [Oracle Labs internship program](#), please provide us with the following information to apply:

- Your CV or link to your home page containing your curriculum
- Description of your motivation and area(s) of interest
- Availability and preferred internship duration
- Preferred location

If available, please apply to this topic via the internship portal of your university. Alternatively, send an email with the aforementioned information to [Labs-Hiring\\_ww@oracle.com](mailto:Labs-Hiring_ww@oracle.com).

### About Us

Innovation starts with inclusion at Oracle. We are committed to creating a workplace where all kinds of people can be themselves and do their best work. It's when everyone's voice is heard and valued, that we are inspired to go beyond what's been done before. That's why we need people with diverse backgrounds, beliefs, and abilities to help us create the future, and are proud to be an affirmative-action equal opportunity employer.

Oracle is an Equal Employment Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, sexual orientation, gender identity, disability and protected veterans status, age, or any other characteristic protected by law. Oracle will consider for employment qualified applicants with arrest and conviction records pursuant to applicable law.

### Life at Oracle

An Oracle career can span industries, roles, countries and cultures, giving you the opportunity to tackle new roles and challenges, while blending work and life. Oracle has thrived through 40+ years of change by innovating and operating with integrity while delivering for the top companies in almost every industry. To nurture the talent that makes this happen, we work hard to build a vibrant and inspiring workplace that celebrates diverse, hardworking teams where everyone can contribute. We take care of each other, and value giving back to the community. We have flexible work arrangements and offer benefits including generous paid parental leave and comprehensive premium medical insurance.

We will ensure that individuals with disabilities are provided reasonable accommodation to participate in the job application or interview process, to perform crucial job functions, and to receive other benefits and privileges of employment. Please contact us to request accommodation.

At Oracle, we don't just respect differences—we celebrate them. We believe that innovation starts with inclusion and to create the future we need people with diverse backgrounds, perspectives, and abilities. That's why we're committed

various technical expertise (and from all around the globe), from which I learned a lot.

All in all, my internship at Oracle was a very worthwhile experience.”

**Christopher Ferreira**  
6-month intern

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[More information on Oracle's stance on diversity and inclusion](#)