# Pedro H. S. Duarte

# Skills

Languages: Java, Python, JavaScript, TypeScript, SQL, Dart.

**Technologies & Tools:** Docker, Terraform, Linux, PostgreSQL, Spring, Micronaut, Flask, GraphQL, React, Spark, Keycloak.

**Cloud:** AWS (Lambda, DynamoDB, ECS/Fargate, VPC, IAM, S3, RDS/Aurora, SQS/SNS, CloudWatch, etc.), Azure (Function Apps, ADLS, Synapse Analytics, Entra, Container Apps, etc.), GCP, Firebase.

**Fundamentals:** Network & Web Security, OOD, DDD, REST, TDD, Continuous Delivery, Software Architecture, Observability.

# Work Experience

## Entrustody, Uberlândia (remote, US-based company)

Apr 2023 - Present

#### Software Architect

- Led end-to-end development of a scalable, multi-tenant Data pipeline and Analytics solution, driving data-informed decisions for financial advisors.
- Reduced annual Azure cost by 60% through strategic service selection and identifying unused resources.
- Enhanced data security and compliance by migrating core legacy Azure infrastructure to a private network topology.
- Azure, AWS, TypeScript, Spark, Delta Lake, PostgreSQL, Docker, Terraform, GraphQL, Prisma, Log Analytics, Azure Monitor.

Exacode, Uberlândia Jul 2020 - Mar 2023

#### Software Architect

- Reduced client's expenses by over 30%, by digitalizing their operations through building a serverless e-commerce app.
- Built a health tracking app, achieving 92% user retention, and 4.9-star app store rating.
- Developed business system for a F500 client, accelerating deal closure velocity by 40%.
- AWS, GCP, Firebase, Java, Spring, Python, Node.js, TypeScript, Terraform, React, Tailwind, Flutter, Redis, Cloud-Watch, Crashlytics.

Yandeh, Uberlândia Sep 2018 - Jul 2020

#### Software Architect

- Streamlined cross-application user experience by implementing SSO solution using Keycloak.
- Optimized clients' sales operations by architecting a B2B platform for complex sales campaigns configuration.
- Improved the development team's feature delivery rate by fostering continuous delivery best practices.
- AWS, Java, Python, Node.js, TypeScript, Terraform, Docker, Keycloak, Flask, React, CircleCI, New Relic, OpenID, OAuth, Kibana.

## Hub Fintech, Uberlândia

Sep 2017 - Aug 2018

## Senior Software Engineer

- Enhanced security and compliance of ISO 8583 payment processing platform by creating a fraud detection module.
- · Facilitated fund transfers of a digital banking client by implementing an account linking feature.
- Java, RabbitMQ, Angular, MySQL, JUnit, Hystrix, Jenkins.

#### Algar Telecom, Uberlândia

Oct 2013 - Aug 2017

#### Senior Software Engineer

- Developed multiple core applications for OSS/BSS telecom systems, streamlining operations.
- Java, JavaScript, Spring, JavaEE, WildFly, JBoss, Tomcat, Angular, PostgreSQL, Docker, REST, SOAP, Hystrix, Hazelcast, Jenkins.

### Kyros, Uberlândia

Jun 2011 - Sep 2012

#### Software Developer

- Contributed to new and existing custom modules of a complex billing system (Comverse ONE).
- Python, PL/SQL, Shell script.

## Education

#### Universidade Federal de Uberlândia

2009 - 2013

B.S. in Computer Science

Relevant Coursework: Object Oriented Programming, Databases, Discrete Maths, Data Structures and Algorithms, Analysis of Algorithms, Cryptography, Operating Systems, Computer Networks, Data Mining, Image Processing.

# **Project Work**

- Research on Public Transportation Systems (2016): Proposed and simulated a low cost inter-networking architecture and ontology for monitoring and improving public transportation systems. Used: MikroTik routers, OpenWrt, Shell script, Docker, Veins.
- EasyBus (2016): Designed and developed near real-time bus tracking system, integrating IoT devices for accurate ETAs and passenger counts. Used: Raspberry Pi, Pi Camera, Python, AWS services.

# **Publications**

• "An Architecture for Monitoring and Improving Public Transportation Systems" — IEEE (AINA), 2016 - https://ieeexplore.ieee.org/document/7474181.

# Awards and Certificates

- Exam Certificate: ITIL® Foundation Certificate in IT Service Management (ITILF) (2013).
- Certified Linux Administrator (LPIC-1) (2013).
- Oracle Certified Professional, Java SE 6 Programmer (2012).
- Teaching Assistant at Universidade Federal de Uberlândia: Helped CS students to learn algorithms and data structures (2010).