## Richard Tymotheus Purba

Almere, The Netherlands

Mobile: +31 610 63 30 36

Eмаіl: richard.t.purba@gmail.com

Linkedin: Richard Purba Github: richpurba

PERSONAL WEBSITE: richpurba.github.io Born: October 15, 1987 — Medan, Indonesia

NATIONALITY: Indonesian with residence permit to work/relocate freely in EU

### **Current Position**

Software Engineer, Liquid Studio, Accenture

## Work History

| 2015 - 2020 | Accenture, Groningen/Amsterdam/Utrecht — Software Engineer |
|-------------|--|
|             | See more on Accenture                                      |
| 2012 - 2016 | Desa Ternak, West Java Indonesia — Cofounder and CFO       |
|             | See more on Desa Ternak                                    |
| 2014 - 2015 | YESDELFT!, Delft The Netherlands — Entrepreneur            |
|             | See more on YesDelft!                                      |
| 2009 - 2012 | LAPI ITB, West Java Indonesia — Reservoir Engineer         |
|             | See more on LAPI ITB                                       |

## Areas of Specialization

Java — Dev(Sec)Ops

## **Programming**

Advanced

Java/Spring — JavaScript — NodeJs

MEDIUM

Bash — TCP/IP — Python — Matlab — Angular — SQL (Oracle and Teradata)

CURRENTLY LEARNING

Rust

## Application

Advanced

Apache Kafka, Kubernetes, Docker, CentOS/Linux, Git, Jenkins, Maven

Medium

Postgres, Oracle DB, Forgerock OpenIDM/OpenAM/OpenDS, Tomcat/Payara, NginX, MySQL, Ansible, Vagrant

## Project Management

Agile, SAFe

### **Certifications & Courses**

Java OCA 8

Forgerock Identity Management Product Knowledge Computer Systems Engineering, OCW MIT, Concentrating on Distributed Systems

### Education

2009

2010

2015 MSc in Petroleum Engineering, TU Delft, The Netherlands

Thesis: Permeability Estimation with Non-parametric Bayesian Network

BENG in Petroleum Egineering, ITB Bandung, Indonesia

Thesis: The Prediction of Gas and Water Production Profile of Coalbed Methane Reservoir using Material Balance Analysis

## Interest & Hobby

Distributed System, Blockchain, Reading, Travelling, Running, Investment, Philosophy

## Languages

English — Fluent Dutch — A2 Bahasa — Native

### **Publication**

R. T. Purba, D. Abdassah, (2010), "Predicting The Production Profile of Gas and Water of Coalbed Methane (CBM) Field Using Material Balance of Modified G.R.King's Iteration Procedure IPA10-E-112", Indonesian Petroleum Association Journal

### **Detailed Work Experience**

back to Work History

### Accenture

03.2020 present DevSecOps Engineer — Large Swiss Telecommunication Company, Bern Switzerland

- Implementation and design of Forgerock OpenIdm, Forgerock OpenAm, and OpenDS for complex Policy Framework. We implemented Policy Information Point and Policy Administration Point for authentication and authorization of many external customers.
- Leading knowledge transfer for various technical skills such as Git (rebase), JavaScript, SQL database, Docker and others.
- Developed JavaScript (CommonJS and NodeJS), unit test with Jasmine, PIP/PAP model
  with Javascript, Oracle Database deployment (with Flyway migration tool), advanced Jenkins CICD configuration, Docker, Ansible playbook/Vault, Shell Scripting for ad hoc configuration, Operations to troubleshoot some bugs and problems
- Designed and developed the npm project from scratch and make the deployment CICD
  with automated test with Husky and ESLinting, incorporated with Maven Frontend plugin, and automated test with Sonarcube.
- Collaborated in reviewing automated testing tool (Karate), Selenium automation (using WebDriverExtension), and CICD architecture.
- Developed Karate testing tool in (Core) Java for smoke testing purposes, integrated with Selenium.
- Peer-reviewed Java (Spring/boot) microservice for JWT (in XACML form) validation functionality, metrics for latency, unit test, and others
- Engineered automated deployment using various Ansible commands (builtintemplate, copy, community.ldapsearch, to name just a few) and instructions with principle of Infrastructure as a Code.
- Architected and Built a continuous integration and release with Maven Release Plugin
- Implemented basic/mutual authentication, creating HTTPS or CA certificates. Worked in PKI and Vault applications like CyberArc, OpenJDK's keystore, Ansible Vault.
- Developed in Defensive Core Java programming, such as not to use StringBuilder to prevent Denial of Service.
- Secured linux-based containers with appropriate user/group/file/non-root permissions (Principle of least Privilege), hosts files/IP addresses, analysing socket, resources utilization, packet traces, and latency.

o6.2019 present Student Internship Advisory — Internal Recruitment, Accenture Netherlands

• Interviewing interns/students (7+) and responsible for hiring into Accenture

- Acted as a client or technical mentor for Back-end related topics (such as Microservice architecture software)
- Planning, discussing, and envisioning the internship program with Talent for our internal group
- Provided some of the best, newest technology stack for the potential new interns and new joiners such as Micro FrontEnd and Microservice architecture

# o3.2019 **DevOps Engineer** — Large Dutch Telecommunication Company, Amersfoort, The Nether-lands

- Developed microservice pattern in Java to forward User Consents to DataServiceHub, implementing Hibernate (thread-safe) to MySQL, SpringBoot application server, integration testing with failsafe plugin, JUnit testing, http REST and SOAP calls to forward some responses, in concurrent manner.
- Developed containerized middlewares with Docker, utilizing docker network, volumes, intermediate SSH container, and bash scripting
- Deployment containers to Kubernetes cluster with Kuztomize (base/overlay pattern).
- Deeply worked in managing Ingress, pods, ReplicaSet, PVC (for database), Network Policy and others
- Developed NodeJs microservices pattern (with ExpressJs) and unit testing (Sinon, Chai) to create user consents forwarding calls to parallel backend. Focusing on using callbacks/Promise to make forwarding service.
- Maintained PAHO client (written in python) to make MQTT calls to a Data Service Hub
- Developed a Kafka client in AWS that reads from KStream, utilizing ProtoBuf (for SerDes and for inter-language transmission), reading and writing from Consumer/Producer Group (with offset data), and working with Opentracing (Jaeger) to make calls' tracers.
- Developed a Faust worker (in Python) for data analysis from Kafka Stream
- Desiged interface agreement between new APIs for guidance in calling the new API

### DevOps Engineer — Government Pharmaceutical Department, Utrecht, The Netherlands

- Maintaining and Operating a highly customized, Java-based Filenet case management system
- System monitoring (Jenkins and Kibana), deployment/release process (leveraging Maven and Nexus), and code analysis (in Java, involving Java Server Page and HTML/CSS tech).
   Modified source codes in accordance to business requirement and bug findings, stakeholder management (with Functional team, Server Team, Network Team and Project Manager).
- Implementing some test case scenario with Selenium Headless test application
- Analyzing the EURS server and processes, where EURS is the server to validate the eCTD
  validation from European Medical Agency, since there has been many error and failure with
  this system

12.2018

07.2018 11.2018

### JavaScript Developer — Major Flower Company, Aalsmeer, The Netherlands

- Translating wireframe and UI designs from designer team to HTML/CSS/Jquery/Javascript/JSP languages
- Developed with Less/CSS, and HTML5 and tested for major browsers, along with responsive technology of Bootstrap, as to accommodate mobile to large screen sizes/Viewports.
- Modification of Impex feature of SAP Hybris to modify products categories, users' groups and others, to synchronize to the legacy backoffice.
- Development of Out of The Box (OOTB) Hybris pages such as Homepage, Product Detail Pages, Product List Pages, Carousel Image holders, Cart Page, My Company, etc.
- Applying and stimulating best practices in Agile Scrum this system

06.2017 02.2018

### Java Software Engineer — Major Lease Car Company, Almere, The Netherlands

- Developed a feature of IFRS 16 Reporting purposes, utilizing front-end development (in AngularJS framework, leveraging Typescript syntaxes) and back-end technology (Java EE, JBOSS AS), to build the business layer, user-interface layer, and persistent layer.
- Built Python script to automate the creation of SQL queries for database and JSON file for Keycloak (JBOSS product for Identity/Access Management), along with Analyzed Security service API w.r.t User Access Management (Keycloak) especially due to new additional feature conflict.
- Developed Front-end in AngularJS framework using Typescript, providing download function (Blob functionality, including bytearray encoding), sorting order of downloadable files, View-Controller design, Browser type detection (trident functionality) and many others
- Built the solution of Car Policy requirement with dependency on type of fuel, allowed miles and duration. Requirement analysis from the client was achieved by articulating the business purpose (user story), current state, other dependencies with different department/team, and putting them into codes. The development was achieved by building jd-bcTemplate query, myBatis connection and establish the front-end call using Swagger API.
- Developed microservice (under Springboot framework, and many Netflix distributed system stack) for providing values for the Quote calculation and search for drivers. This includes development of the Model-Service-Controller pattern, DAO, query in jdbcTemplate, JUnit testing, Orika mapping, Swagger framework for API development, and server/database connection with YAML type file

01.2017 06.2017

### Business Intelligence Analyst — Major Dutch Bank, Utrecht, The Netherlands

Migrated a legacy software from C++ to SQL in Teradata. This project was to assist User
Acceptance Test with the clients, facing some difficulties in narrowing down historical aspect of business functionality in the code, some code quality, complex mathematical model
code, and some differences of data (the so-called data reconciliation)

- Upgraded Accenture Structured Query Language (SQL) solution for client's Interest Margin (RenteMarge) calculation from a version of C++ legacy software for Application Migration purposes
- Accomplished data verification by reverse engineering various versions of legacy software sources and reduced the differences of row-to-row values less than 1Testing (UAT).

12.2015 12.2016

### Business Intelligence Analyst — Major Dutch Bank, Utrecht, The Netherlands

- An analyst working for Energy Component Software implementation.
- The configuration involves a business case of unload and offload of gas, agreement configuration, interface configuration for Send Out data and database using PL/SQL. The business layer was implemented in Java-based technology

back to Work History

### Desa Ternak

02.2012

### Cofounder and CFO — Desa Ternak

- Raised fund (over USD 60.000+) to found a microfinance-based venture in West Java Banten Indonesia
- We connected many upper-medium class people to invest in growth-focus, isolated village of Sangiang Jaya
- Participated in marketing and financial management especially in sharpening the product and purpose
- Hands-on operation to select the right livestocks and sellers, lifecycle of a stock and managing locals to help with the development

back to Work History

### YesDelft!

08.2014 3.2015

### Entrepreneur — YesDelft!

- Initialized a payment solution with token for music venue (*poppodia in Dutch*) where a user could use their mobile to pay tokens
- Called over 30+ music venues in the whole Netherlands to make a product-fit assessment
- Developed the product with PHP and MySQL (along with HTML/JS for the front end)
- Participated in an in-house course, helped by RolandBerger and EY, for understanding business concept such as cash flow, value propositions, and lean method

back to Work History

## **LAPI ITB**

#### 12.2009 4.2012

## Reservoir Engineer — LAPI ITB

- Conducted various reservoir simulation and prediction and acted as a consultant for various oil and gas clients
- Worked together with Geologists, Petrophysicist, and Geophysicist to create a numerical model for economical impact of a certain subsurface assets.
- Collaborated with Government to review the assessment and conclude subsurface asset valuation
- Managed junior reservoir engineers to get up to speed with analysis and modelling of an oil reservoir

back to Work History