

Henrique Rocha

Telecommunications and Informatics

about

Henrique Duarte Lopes Rocha

01210 Ferney-Voltaire
France

(+351) 938781922

hdlopesrocha91@gmail.com
WebSite
YouTube

languages

portuguese (native)
english (fluent)
french (A2.1)

programming

♥ Java

(Android, PlayFramework, SpringBoot, LWJGL, MapReduce, GWT, AWS, JavaFX, Kurento Media Server, Jetty and Jersey),
♥ Angular, C, C++ (OpenGL), C# (XNA, Windows Forms, WPF, Ipsolve), Grails, VB, Python, Scala, Scheme, HTML, CSS (Bootstrap), JavaScript (jQuery, AJAX, WebGL, WebRTC), PHP (Wordpress), GLSL, HLSL.

databases

DynamoDB, ♥ MongoDB, MySQL, Oracle, Neo4j, PostgreSQL, SQLite.

soft skills

Time Management
Problem-Solving
Team Player
Self Confidence
Adaptability

experience

European Organization for Nuclear Research (CERN)

06 2018 (ongoing)	Full-Stack and Database development	IMPACT
	Maintenance and optimization of an intervention management, planning and coordination tool. Experience with <u>Grails</u> and <u>HazelCast</u> (distributed cache)	
01 2018 (6 months)	Full-Stack and Mobile Development	DigiWare
	Development of a work delivery tool for a warehouse at CERN. Experience with <u>SpringBoot</u> , <u>Ionic Framework</u> , <u>Angular</u> and <u>Hibernate</u> (with Oracle DB)	
10 2017 (2 months)	Front-end development and Business Intelligence	APT
	Maintenance and front-end development of a cost analysis tool for CERN activities. Experience with <u>Grails</u> , <u>GWT</u> and <u>Pentaho</u>	
12 2016 (ongoing)	Applications Development	PLAN
	Development and support for a planning tool for CERN activities. Experience with <u>SpringBoot</u> , <u>Handlebars</u> , <u>Hibernate</u> (with Oracle DB). Used <u>Event Sourcing (ES)</u> and <u>Command Query Responsibility Segregation (CQRS)</u> design patterns.	
10 2016 (2 months)	Full-Stack Development	PM-Support calendar
	Maintenance of a calendar application for support time management. Experience with <u>SpringBoot</u> (integration with <u>JIRA</u>), <u>Thymeleaf</u> and <u>Polymer</u>	

Bullray-CIT

01 2016 (7 months)	Applications Development	
	Development of a user interface for a bank's security device that is synchronized with servers. Micro-controller sensors information receival through <u>USB</u> (<u>org.usb4java</u>), user interface with <u>JavaFX</u> and network camera discovery through nmap (using <u>org.nmap4j</u>)	
11 2015 (2 months)	Android Development	
	Optimization and bug resolution of an <u>Android</u> application that uploads GPS, camera and microphone data in background.	
08 2015 (2 months)	Systems Development	
	Development and configuration of a streaming server that supports receiving and recording video from authenticated users. I tried <u>FFServer</u> , <u>nginx</u> with <u>rtmp</u> module and <u>Wowza Streaming Server</u> , the final decision was <u>Kurento Media Server</u> with <u>WebRTC</u> .	
02 2015 (20 months)	Full-Stack Web Development	
	Development of a solution for a generic incident handling server, support for real time monitoring through <u>WebSockets</u> . Experience with <u>PlayFramework</u> , <u>MongoDB</u> (with the official Java Driver), <u>Maven</u> , <u>jQuery</u> and <u>Bootstrap</u> .	
11 2014 (4 months)	Full-Stack Web Development	
	Development of an architecture for a chat application. Experience with <u>Android</u> , <u>PlayFramework</u> , <u>MongoDB</u> (with <u>Morphia</u>), <u>jQuery</u> and <u>Bootstrap</u> . Message synchronization through HTTP long polling.	

IST

03 2015 (1 year)	Master Thesis watch it Development of an interactive multi user video chat that supports recording, content overlay and a collaborative text editor. Used Kurento Media Server for mixing streams into a single one and detecting QR codes. Experience with ot.js for operation transformations (collaborative component). Other libraries used, jquery.qrcode , vis.js , bootstrap-typeahead , codemirror.js and adapter.js . Little experience with strophe.js for communication between web browsers and XMPP servers.	IST
04 2014 (6 months)	Scientific Initiation Scholarship Frontend Development for Provide Results's Bimk project. Experience with PlayFramework , Revit API and GIT .	INESC
09 2013 (6 months)	Scientific Initiation Scholarship Programming a Decision Analysis Software (MACBETH) with WPF . Development of an algorithm to suggest judgements based on past decisions using Ipsolve .	CEG-IST

Other

08 2013 (2 weeks)	Summer Work Frontend development for a Decision Analysis Software using ASP.NET .	LCG
11 2012	Pizza Night Competition 2º place on Windows Phone Category with Infinity Edge game.	Microsoft Lisbon Experience
08 2006 (1 month)	Garbage Collector Cleaning and maintenance of public spaces.	Jovens em Movimento, Oeiras

education

2013–2016	Master of Science Telecommunications and Informatics Engineering (Final Grade: 16 in 20)	Instituto Superior Técnico - Taguspark
2009–2014	Bachelor of Science Communication Networks Engineering (Final Grade: 13.2 in 20)	Instituto Superior Técnico - Taguspark

applications

2015	Bomb Raider Bomb Raider is a simple singleplayer and multiplayer game where the goal is destroying all enemies in the map. I used OpenGL and WiFi-Direct to develop this Android game.	Google Play
2013	OpenGlobe Modeling Earth surface with GPS devices and topographic collected data. It is also possible to predict satellites position through ephemeris data.	Instituto Superior Técnico
2012	Infinity Edge (Windows Phone 7) First Person Shooter with spaceships made on my free time. I had experience with XNA and HLSL .	windows marketplace
2011	Era of Empires 3D environment generator and Real Time Strategy game engine using OpenGL .	Personal Project

interests

3D Studio Max, Photoshop, Game Development, Web Design, Network Security, Jogging, Kayaking, Karate and Yoga.

`return 0;`