

Henrique Rocha

Telecommunications and Informatics

about

Henrique Duarte Lopes Rocha

Rua dos Cedros nº100
Alto do Lagoal
2760-025 Caxias
Portugal

(+351) 938781922

hdlopesrocha91@gmail.com
WebSite
YouTube

languages

portuguese (native)
english (fluent)

programming

♥ Java

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

databases

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

soft skills

Time Management
Problem-Solving
Team Player
Self Confidence
Adaptability

education

2013–now	Master of Science Telecommunications and Informatics Engineering (Expected 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
2006–2009	Secondary School Science & Technology	Escola Secundária Luís de Freitas Branco, Paço de Arcos

experience

01 2016 (ongoing)	Applications Development 1000€/month (part time) Development of a user interface for a bank's security device that is synchronized with servers. Microcontroller sensors information receival through USB (org.usb4java) , user interface with JavaFX and network camera discovery through nmap (using org.nmap4j)	Bullray-CIT
11 2015 (2 months)	Android Development 1000€/month (part time) Optimization and bug resolution of an Android application that uploads GPS, camera and micro-phone data in background.	Bullray-CIT
08 2015 (standby)	Systems Development 1000€/month (part time) Development and configuration of a streaming server that supports receiving and recording video from authenticated users through ffmpeg . I tried FFServer , nginx with rtmp module and Wowza Streaming Server , the final decision was Kurento Media Server with an RTP endpoint for receiving video from network cameras and a WebRTC endpoint for delivering the video to web browsers.	Bullray-CIT
03 2015 (ongoing)	Master Thesis 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
02 2015 (ongoing)	Full-Stack Web Development 1000€/month (part time) Development of a solution for a generic incident handling server, support for real time monitoring through WebSockets . Experience with PlayFramework , MongoDB (with the official Java Driver), Maven , jQuery and Bootstrap .	Bullray-CIT
11 2014 (4 months)	Full-Stack Web Development 1000€/month (part time) Development of an architecture for a chat application. Experience with Android , PlayFramework , MongoDB (with Morphia), jQuery and Bootstrap . Message synchronization through HTTP long polling.	Bullray-CIT
04 2014 (6 months)	Scientific Initiation Scholarship 385€/month (part time) Frontend Development for Provide Results's Bimk project. Experience with PlayFramework , Revit API and GIT .	INESC
09 2013 (6 months)	Scientific Initiation Scholarship 385€/month (part time) Programming a Decision Analysis Software (MACBETH) with WPF . Development of an algorithm to suggest judgements based on past decisions using lpsolve .	CEG-IST

08 2013 (2 weeks)	Summer Work Frontend development for a Decision Analysis Software using <u>ASP.NET</u> .	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 120€/month(full time) Cleaning and maintenance of public spaces.	Jovens em Movimento, Oeiras

applications

2017	My personal website I like PlayFramework, but I still like more to learn different technologies, that's why I did this website using ???, just for fun.	henrique.rocha.pt
2015	Bomb Raider Bomb Raider is a simple singleplayer and multiplayer game where the goal is destroying all enemies in the map. I used <u>OpenGLES</u> and <u>WiFi-Direct</u> to develop this <u>Android</u> 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 <u>XNA</u> and <u>HLSL</u> .	windows marketplace
2011	Era of Empires 3D environment generator and Real Time Strategy game engine using <u>OpenGL</u> .	Personal Project

interests

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

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return 0; // ends gracefully
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