

PROFESSIONAL EXPERIENCE

Software Developer & Configuration Manager Softwire Romania

Jul. 2017 – present

Projects:

Designed and implemented a software pipeline for automated video annotation using speech recognition
Built various functionalities for several web apps, both on frontend and on backend. On the most popular web app, my work impacted an estimated 50.000 users
Developed a portable video player library for Roku smart-TV system, implemented Adobe analytics for Android and HTML5 video players
Applied extreme programming and agile methodologies, used test driven development approach, was in charge of development, QA, code review; team sizes ranging from 2 up to 12 people
Managed the relationship with several departments and clients on behalf of Softwire Romania as part of the CM responsibilities

Tech skills:

TypeScript, Node.js, Neo4j Cypher, git, SCSS, LESS, SASS, BrightScript, SceneGraph, React, Redux, Javascript, Knockout.js, webpack, Python, CMUSphinx, Java, Adobe Heartbeat, C#, Python, PHP, AWS ecosystem

Other skills:

Scrum/Agile, extreme programming, unit testing, test driven development, business management

Teaching Assistant UPB - ACS

Oct. 2017 – present

Courses:

Logical Engineering (lab) – Conf. Costin Chiru
Computer programming (lab) – S. I. Vlad Posea, S. I. Traian Rebedea
Algorithm analysis (seminar) – S. L. Matei Popovici
Programming paradigms (seminar) – S. L. Matei Popovici

Freelance Programmer Elance.com / Upwork.com

2015 – 2017

Projects (non-exhaustive):

Built assembly code and FPGA circuitry simulators in C with CUI and OpenGL GUI with interfaces to video and audio drivers, serial and parallel ports, timers and counters, stack and function calls, step debugging
Designed, developed and extended various websites and web plugins in PHP and ASP.NET - involving web data scrapping, usage of Google Translate and Google Adwords APIs, SQL database backends
Developed VBA scripts for Microsoft Office and C# applications using Microsoft Interop Libraries for both Office and Internet Explorer with the purpose of task automation and optimization

Tech skills:

C/C++, C#, OpenGL, HTML, Javascript, CSS, jQuery, Google Adwords API, Google Translate API, Google Maps API, assembly language, operating systems, automated testing, VBA, PHP, ASP.NET, Prolog, Microsoft Interop Libraries

Other skills:

Rapid prototyping, estimating project execution time, communication with clients in non-technic language, price negotiation

RESEARCH

17th RoEduNet Conference: Networking in Education and Research

Sep. 2018

Paper:

AB Popa, IM Stan, R Rughinis – Instant payment and latent transactions on the Ethereum Blockchain
<https://ieeexplore.ieee.org/abstract/document/8514139>
Designed and built an innovative way of implementing latent transaction and credit, on top of the Ethereum Blockchain (Solidity 0.5.0)

Skills:

Ethereum development, ERC20 standard, Solidity, Python, Flask, SQLite, SQLAlchemy, Conda, ECDSA

COMPETITIONS AND PROJECTS

BEST Engineering Marathon

Apr. 2018

Project:

Developed a web app that employs several location-related APIs to present information for tourists

Awards:

Accenture – third prize

Skills:

Javascript, CSS, Google Maps API, weather forecast APIs, currency conversion forecast APIs, Google Places API

BRD FIRST Tech Challenge**2017-2018 season****Volunteering:**

Participated as Field Inspector & Referee at FIRST international robotics contest for young children

Innovation Labs 2017**Feb. 2017 – Jul. 2017****Project:**

Participated in the ILabs2018 startup pre-accelerator program with SMity, a management and monitoring platform for smart cities. As part of the program, I worked not only on development, but also on customer research, marketing strategies, team communication and management, fund raising techniques, business plan building

Awards:Innovation Labs – participation to Innovation Labs 2017 final round
Orange Romania – Imagine with Orange prize for smart territories category
Microsoft – participation to Imagine Cup Romania final round**Skills:**

Node.js, CSS, Elastic Search, business development

**Linux Embedded Challenge
NXP Semiconductors Romania****Apr. 2017 – Jun. 2017****Project:**

Developed an intelligent adaptive headlights system implemented on a UDOO Neo board

Awards:

LEC 2017 – third prize in the LEC 2017 final round

Skills:

C, Python, image processing, OpenCV, low level programming

**HackTGM
Sapientia University****Apr. 2017****Project:**

Developed a platformer arcade video game that uses machine learning to generate harder levels depending on user's facial emotions

Awards:

HackTGM - First prize for best game

Skills:

Unity, game design, game development, Microsoft Emotion Detector API

EDUCATION**2018 – 2020**Master's degree in Financial Computing
University POLITEHNICA of Bucharest – The Faculty of Automatic Control and Computer Science**2018 – 2020**Psycho-pedagogical module, Level II
University POLITEHNICA of Bucharest – The Faculty of Automatic Control and Computer Science**2014 – 2018**Bachelor's degree in Computer Science – Application Systems and Artificial Intelligence
University POLITEHNICA of Bucharest – The Faculty of Automatic Control and Computer Science**2014 – 2017**Psycho-pedagogical module, Level I
University POLITEHNICA of Bucharest – The Faculty of Automatic Control and Computer Science**2010 – 2014**

„Mihai Viteazul” National College, Bucharest – informatics class

OTHER AWARDS**2013**

Silver Medal and Mention in the National Physics Olympiad, DRM Draxlmaier Romania's prize for the best experimental work and Bucharest City Council's Diploma of Excellence

2011

First Prize in National Informatics Contest "Urmasii lui Moisi" and Bucharest City Council's Diploma of Excellence

2011

First Prize in National Informatics Contest "Tudor Sorin"

2010

Mention in Associated I.M.A.C (International Mathematical "ARHIMEDE" Contest), 4th Edition

2009

Special Mention in the National Chemistry Contest "Raluca Ripan"

2007

Silver Medal and Mention in the National Mathematics Olympiad and "Mihai Botez" Special Prize

2006

Mention in National EuroJunior Program