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| **Alin Popa** | **+40 745 76 05 64**  **alin1popa@gmail.com**  **www.alinpopa.eu** |

**PROFESSIONAL EXPERIENCE**

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| **Software Developer & Configuration Manager**  **Softwire Romania**  **Jul. 2017 – present** | **Projects:**  Managed, developed, and maintained **large-scale cloud infrastructures in the AWS ecosystem** - responsibilities included: updating infrastructure-as-code templates, monitoring logs, configuring alerts, handling live deployments, notifications, emails.  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 the UI and logic of online maternity/paternity leave request forms on behalf of UK govt.  Built a **version management and deployment pipeline and infrastructure** for TV channel apps.  Developed a portable video player library for Roku smart-TV system, and implemented various BARB measurements for Android and HTML5 video players: Kantar, Youbora, Adobe Heartbeat  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 client departments** on behalf of Softwire Romania as part of the CM responsibilities. Managed a Softwire intern to **ensure technical progress and proper development**.  **Tech skills:**  TypeScript, Node.js, Neo4j Cypher, git, SCSS, LESS, SASS, BrightScript, SceneGraph, React, React Redux, Javascript, Knockout.js, webpack, Python, CMUSphinx, Java, Adobe Heartbeat, Nunjucks, Angular.js, Ruby on Rails, C#, Entity Framework, 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**

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| **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**

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| **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 Inovation 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**

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| **2020 – present** | **Ph.D. degree in** **Applied Financial Machine Learning**  University POLITEHNICA of Bucharest **–** The Faculty of Automatic Control and Computer Science |
| **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**

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| **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 Moisil" 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 |