Curriculum Vitae Valentin Ogrean

### PERSONAL INFORMATION

## Valentin Ogrean



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PhD student in Computer Science at the Faculty of Engineering, "Lucian Blaga University", Sibiu – Knowledge field: multi-organ segmentation of human organs from medical imaging.

More than 20 years' experience in developing on-premises & cloud solutions, having different roles and responsibilities: software engineering, technical leading, software architecture, project management while covering the end-to-end spectrum of IT development.

Proven experience in technical consultancy.

Developed management skills by working as a project manager and by having different management support roles in the organization.

### **EDUCATION**

### Academic Qualifications

- Currently working on a PhD in Computer Science at Faculty of Engineering Department of Computers - from "Lucian Blaga University", Sibiu
- MSc. in Computer Science at Faculty of Engineering Department of Computers from "Lucian Blaga University", Sibiu
- Engineer's degree obtained at the Faculty of Engineering Department of Computers from "Lucian Blaga University", Sibiu

### **Publications**

- V. Ogrean and R. Brad, "Deep reinforcement learning architectures for automatic organ segmentation," Biomedical Signal Processing and Control, vol. 90, p N105919, ISSN 1746-8094, p. 84, April 2024, WOS:001165335200001, Q2, doi: 10.1016/j.bspc.2023.105919, Impact factor: 5.1, Citescore 8.2.
- V. Ogrean and R. Brad, "Multi-Organ Segmentation Using a Low-Resource Architecture," Information, vol. 13, no. 10, p. 472, Sep. 2022, doi: 10.3390/info13100472, Impact factor: 3.1, Citescore 5.8.
- V. Ogrean, A. Dorobantiu, and R. Brad, "Deep Learning Architectures and Techniques for Multi-organ Segmentation," IJACSA, vol. 12, no. 1, 2021, doi: 10.14569/IJACSA.2021.0120104.
- Dorobanţiu, A.; Ogrean, V.; Brad, R. "Coronary Centerline Extraction from CCTA Using 3D-UNet.", Future Internet 2021, 13, 101. https://doi.org/10.3390/fi13040101

### **WORK EXPERIENCE**

September 2021 - Present Solutions Architect

Endava

October 2020 - September 2021 Solutions Architect

Nagarro - acquired iQuest Group

October 2014 - October 2020 Tech Lead

iQuest Group

August 2011 - October 2014 Senior Software Engineer

iQuest Group

November 2007 - August 2011 Technical Project Coordinator

Continental Automotive Systems

Esox Informatica

November 2000 - May 2005 Software Engineer

Soft Plus

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### **SKILLS**

#### Summary

- Ability to execute and coordinate the definition of the solution architecture in complex projects.
- Ability to coordinate the technical activity within the team, responsible for the end-to-end delivery of projects.
- Team player and respected team leader; project management skills and experience; well organized.
- Ability to understand and model various business needs.
- Ability to drive pre-sales and up-sales activities.
- Good communication skills, open-minded and flexible.
- Constant learner.
- Experience as a professor at university level.

# Technical competences - Solution and Software Architecture

- Experience in Enterprise Architecture implementing complex solutions; great experience in the Life Science field.
- Defined the technical solution or drove the implementation on more than 10 long-term projects; involved in the full project lifecycle from the presales phase (offers, presentation, onsite workshops etc.) to architecture and design to implementation and delivery.
- Software Architecture Documentation creation and maintenance
- Experience with various solution types: Standard desktop and web applications, EAI (Enterprise Application Integration), Embedded solutions, Cloud solutions, Web Content Management, Document Management
- Understand industry-specific business requirements, trends, competitive environment, directions, and effective applications of IT in that industry.
- Up to date with latest technology trends.

### **Programming Languages**

Experienced with C# (10+ years), C++ (7+ years), Python (5+ years), TypeScript (1 year)

### **Technologies**

- NET Framework, .NET Core, Service Bus, SSIS, IIS, Solr, Angular, Keras, Tensorflow, Scikit, AutoML, ML.Net, Electron, Docker
- Cloud: Azure, AWS
- Databases Relational: MSSQL, Oracle Database
- Database NoSQL: MongoDB, SolR, Lucene .NET, CosmosDB
- ORM: Entity Framework
- Markup Languages: HTML, XML, RSS, JSON
- Testing Frameworks: NUnit, Jasmin, MS Tests, Moq
- Web & Application Servers: IIS, Node.js
- Code Repository: GIT, SVN, Azure DevOps
- CI/CD: Jenkins, Azure DevOps

### Software Design

- Good knowledge of OOP, Design Principles and Design Patterns
- Good knowledge of UML, C4
- Good knowledge of Evolutionary Design
- Able to understand and design enterprise architectures on premises & in cloud

### Selected projects

"Solutions architecture on enterprise project" – Driving the definition of the architecture for the implementation of a companywide process (pharmaceutical company). Responsibilities:

- XAD creation
- Governing the integrations/interfaces specifications
- Tracking supplier adherence to the overall solution

Complexity: Enterprise Role: Solutions Architect

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"Pharma platform for supporting medical treatment" – Azure/.Net based platform for automating and supporting the management and monitoring of patient treatment in clinics.

Size: 5k md, 10k+ envisioned users, complexity: Enterprise Technologies: Azure, Azure DevOps, .Net Core, EventHubs, IoT

Methodology: Waterfall, Scrum

Responsibilities:

- Technical requirements management and clarification (functional and non-functional)
- Governing technical scope
- Architecture Definition
- Technical coordination: technical end-to-end accountability

Role: Software Architect, Technical Lead for a team of 2-5 developers

"Technical consultancy" – Technical consultant – on-site – for a pharmaceutical company. The main responsibility was to counsel as a technical expert a team that drove a companywide stream of improving and unifying the IT software landscape inside the company.

Complexity: Enterprise

Role: Technical consultant, Solutions Architect

"Biostatistics core library" – C++ (later ANSI-C) library used as a mathematical and statistical core used in medical instruments for patient analysis calculations.

Size: 2k md, 10k+ instruments, 10+ statistic team, complexity: Enterprise

Methodology: Waterfall, later Agile

Technologies: C++, ANSI-C, unit testing, statistical libraries

Responsibilities:

- Technical requirements management and clarification (functional and non-functional)
- Governing technical scope
- Technical coordination; technical end-to-end accountability
- Development
- Deployment

Role: Developer, later tech lead for a team of 2-3 members

"Pharma e-Portal" – .Net/MSSQL based portal used for data monitoring from medical instruments around the globe, developed for a pharmaceutical company.

Size: 10k md, 50+ users, >500GB data, complexity: Enterprise

Technologies: MSSQL, SASS, .NET Framework, ASP.NET, Reporting Services

Methodology: Waterfall, Scrum

Responsibilities:

- Technical requirements management and clarification (functional and non-functional)
- Governing technical scope
- Architecture Definition
- Technical coordination; technical end-to-end accountability
- Development
- Deployment

Role: Software Architect, Technical Lead for a team of 2-4 developers

Role: Project manager - during a one-year period (switch from technical role)

"Pharma repository" – MSSQL/.Net/Solr based repository and service provider for the business metadata of a pharmaceutical company.

Size: 10k md, 25+ integrations with other systems, 50+ users, >500GB data, complexity: Enterprise Technologies: MSSQL, OData, WCF, Service Bus, Solr

Methodology: Waterfall, Scrum

Responsibilities:

- Technical requirements management and clarification (functional and non-functional)
- Governing technical scope
- Architecture Definition
- Technical coordination; technical end-to-end accountability
- Deployment

Role: Software Architect, Technical Lead for a team of 3-8 developers; Program technical coordinator Role: Project manager – during a one-year period (switch from technical role)

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"Pharma applications bundle that support development of instruments" - .Net/Angular/MSSQL based portal for instrument and warehouse management, importing and parser workers for handling instrument data. Exporting data to bio-statistical tools used in the development of the instrument. Size: 2.5k md, 20+ users, >4TB data, complexity: Enterprise

Technologies: MSSQL, .Net Core, Angular, DevExtreme, Entity Framework Core, RabbitMQ Methodology: Waterfall, Scrum Responsibilities:

- Technical requirements management and clarification (functional and non-functional)
- Governing technical scope
- Architecture Definition
- Technical coordination; technical end-to-end accountability
- Deployment

Role: Software Architect, Technical Lead for a team of 3-5 developers

### Organizational experience

### "Member of the Leadership group for iQuest's Microsoft Solutions Department"

As member of the Leadership group, I was responsible for driving several operational streams like technical development, technical community coordination, career management and growth for the people in the department.

Size: 140+ team members, complexity: high

Duration: 6 years

### Language skills

English - reading, writing, and speaking fluently.

Italian - reading, writing, and speaking fluently.

German - reading, writing, and speaking beginner level.

French - reading, writing, and speaking beginner level.