

Costin Grigore

Hands-On Software Architect

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Resume

Profile

I'm a software engineer with 24 years of experience in various **industries** and software **types**. I had all the **roles** that exist in a software project or startup from coder, to product owner, to CTO and CEO.

To succeed you need **passion, vision, creativity, experience** and a deep understanding of the issues that show up in software development. Embracing change and prediction is less costly than recovering.

I equally love and enjoy project **startups**, **legacy** project **migrations** or project **recovery**.

My preferred technology stack is **Java** + **Scala** + **Vue**, backed by agile eXtreme Programming practices.



Skills & Roles

Project & Team Leadership

Software (Re)Architecture, (Re)Design, Migration

eXtreme Programming: Agile, TDD, BDD, XP

Product Owner, MVP

Full-Stack Development, Engineering and Program Manager, CTO

Continuous Integration and Delivery (CI/CD)

Work Experience

Software Architect – Revobet – Sports betting industry - revobet.com 2017-2024

Delivered, with the 10 people team, a low latency, multitenant, SAAS solution, feed agnostic with risk management, payments, bonus, help desk, translations and multiple other integrations. Technologies: Java 17, Kafka, Prometheus, MQ, Vue, responsive, mobile-first, Kubernetes.

Software Architect – ECAS-UUMDS - European Commission – DIGIT 2015-2016

Migrated legacy ECAS & UUMDS solutions to Docker Compose.

Software Architect – EESSI - European Commission – DG EMPL 2011-2014

Delivered working prototype and won competition with MS and IBM prototypes for a Distributed Flow Management solution: multi-hop, no size limitation, efficient multi-party end-to-end encryption: Java.

Technical Lead – Tech Finance - XOOM/Gemini Solutions **2006-2010**

Delivered banking integration framework for money transfer for the Silicon Valley startup. Led a team of 12 senior developers: Java.

Java Engineer - Softwin, Alvarion, Redpoint 2000-2005

Multiple projects delivered. Research on DSP & AI.

Online

linkedin.com/in/raisercostin
stardev.io/developers/raisercostin
github.com/raisercostin
stackoverflow.com/users/99248
goodreads.com/raisercostin
raisercostin.org

Hobbies

Reading: SF, philosophy, non-fiction
Taxonomies
Polymath

Education

Master of Science in Computer Science

Polytechnic University of Bucharest - 2002-2003

Graduated with a perfect score 10/10 on the diploma exam.

Bachelor of Science in Computer Science, Systems Major (C3)

Polytechnic University of Bucharest - Computer Sciences – 1997-2002

Diploma exam grade: 10/10, Average grade over 5 years: 8.96

Baccalaureate Diploma, Intensive Computer Science

High School - 1994-1997

Achievements in the National Olympiad in Informatics: 2nd Place and Honorable Mentions

Main Areas of Expertise

Roles

Team Lead, Lead Developer, Mentoring, Coaching, Internship	19y 3
Business Development	9y 1
Executive Operational & Strategic (business, finance, hiring, operation, marketing planning)	4y 0
Technology Selection, Program Manager	18y 4
Project Management, Negotiator	16y 9
Product Owner, UX User Experience, Business Analyst	13y 1
Architect, System Design, Application Design	22y 4
Data Modeler, Database Design	19y 0
Software Engineer, Programmer (+unit testing & TDD)	32y 4
Build Configuration (maven, CI/CD – Continuous Integration/Delivery/Release)	19y 8
Migration expertise (legacy systems migration)	19y 0
Project Startup (create prototype, architecture, team)	17y 4
Operations (docker, vagrant, virtualization, Kubernetes)	9y 1
Quality Assurance (testing strategy, management)	10y 8

Project Types & Industry

Sports Betting (low latency systems, Kafka, self-learning)	5y 0
Integration (ESB, camel, REST, database, Message Queues, High Vol Ingestion, Kafka)	9y 1
Insurance & Risk Management	1y 5
Graph Databases (Arango DB)	4y 2
Security (SAML, OAuth, OpenID, PKI, IAM, IDM, Keycloak)	5y 7
Scraping, Crawling, Indexing, Data Extractors, Actors, Parallelism, Reactive	5y 8
Distributed Workflow Management, Event Sourcing, Message Exchange, Journaling (integration between countries' systems)	7y 5
Financial (online payment, money transfer systems, banking API, crypto)	8y 0
Telecom (tracking key metrics of devices and equipment in telecom industry)	0y 9
NMS (network management system, SNMP control)	1y 0
R&D (Data Acquisition, Signal Processing, Biometric Signal, Artificial Intelligence)	0y 8
ERP (financials, stocks, project management – database intensive)	4y 0
Web (photo, ecommerce, webic, responsive)	14y 0
Rich Client Applications (NMS, WebInfoControl, brompton configurator, bets)	7y 7
Algorithms (production optimization planning, CS contests)	15y 8

Others: rhyme and language dictionaries, taxi reporting	0y 5
Mobile/Android (zdreanta)	1y 3

Preferred Development Style

Agile Methodology	18y 0
Test/Behavior Driven Development (TDD, BDD)	18y 0
Pair Programming	14y 7
Refactoring	18y 0
UML description	20y 0
Continuous integration and Delivery	16y 3
Objectual/Declarative/Functional/Aspect Programming Paradigms	24y 2
Rapid Development (RIA)	6y 9

Preferred Technology Stack

Functional development: scala, reactive streaming, functional collections, vavr, monads	10y 7
Scala, Akka(reactive), Slick	5y 7
Java, Spring Framework, Hibernate & JPA, JUnit, SQL, lombok, mapstruct, jOOQ	17y 6
UX, Vue, vuetify, quasar, material design, typescript	6y 5
Databases: posgres, h2, mysql, oracle, SQL Server	14y 4
NoSql Database: graph, arangodb, document database	4y 5
Bootstrap(responsive), JQuery, CSS3, javascript, HTML	16y 7
Regex, JSoup, XSLT, json, yaml	11y 5
Maven, gradle, eclipse, subversion/git	17y 7
Jenkins, jira, gocd, gitlab, github, gocd	11y 2
Docker, vagrant, k9s, kubernetes	5y 6
Shell (linux,unix,osx)	11y 8
Android	2y 1

Great Expertise in Obsolete Technologies :-)

XML & WS: XML, XSD, WSDL, SOAP	11y 7
UI: GWT, Spring MVC, playframework	10y 3
SBT, Ant, shell(linux,unix,osx)	7y 8
C, C++	5y 0
perl, PHP	1y 7
Oracle Designer	2y 5

Self-Portrait

Books that I Love

- Ron Jeffries – The Nature of Software Development
- Andrew Hunt, David Thomas - Pragmatic Programmer
- Steve McConnell – Code Complete 2
- Joel Spolsky - Smart and Gets Things Done
- Kent Beck - Test Driven Development By Example
- Robert Martin – Clean Code
- Steve Krug – Don't Make Me Think
- Tom DeMarco – The Deadline
- Martin Fowler - Refactoring Improving the Design of Existing Code
- Martin Fowler – Domain Specific Languages

Frederick Brooks - The Mythical Person-Month Essays on Software Engineering



Interests

Professional: analysis, design, TDD, BDD, XP methodology, refactoring, pair programming, programming language paradigms, NoSQL databases, reactive programming, responsive design
Personal: literature, psychology, martial arts, theater, acting, SF, biology

Detailed Experience



Lead Software Engineer – SpotOnFinance

2023.jun / 1 year +

Spot On Finance - Finance for owners. 3 devs * 1 year
Using AI to parse any bank statement and categorize it. Launching from zero to production in 6 months.
 product owner, architecture, design, development  java, vue, springboot, postgres, docker, cloudflare



Software Architect – Revobet

2018.dec/4years 5months

Sports Betting System - high volume feed ingestion and data consolidation 10 people * 4.5 years
Delivered, with the 10 people team, a low latency, multitenant, SAAS solution, feed agnostic with risk management, payments, bonus, help desk, translations and multiple other integrations. Technologies: java17, Kafka, Prometheus, MQ, Vue, responsive, mobile-first, Kubernetes, multiple environments, disaster recovery, rapid dev, reactive streaming, prevent vendor-lock-in
 development, technology selection, integration, design,  java, functional, vavr, mapstruct, lombok, vuetify, nuxt architecture, internship



Principal Software Engineer – Revomatico

2017.jan/2 years

IAM Telecom A1 Bulgaria - IDM, midpoint, database & REST integration, approval flows 3 people * 10 months
Generic ConnId REST connector extend existing product
 integration, development, technology selection  midpoint, camel, ConnId, ICF Identity Connector, java

Software Architect – European Commission DIGIT

2015.Sep/13 months

UUM&DS – ECAS - IAM, IDM, security, authentication, SAML – TAXUDCAS 8 people * 5 years
Migrated legacy ECAS & UUMDS solutions to docker compose: including ECAS, ECAS client, IAM. Federation of Member States IAM solutions using SAML, eIDAS technologies, ECAS
 Integration, development, operation, technology selection  java, maven, docker, git, agile, weblogic, oracle db

Senior Software Engineer – Brainlight

2014.jan/2 years

Darzar ↗ - product extractor, crawler, scrapper, responsive, facet search

2 people * 1 year

In beta, online with 33.000 products from over 100 romanian e-shops.

👥 product owner, architecture, design, development, integrator, ✂ scala, sbt, eclipse, git, agile, wiki technology selection

Software Architect / Team Leader – European Commission DGEMPL

EESSI - distributed flow management/choreography between European institutions

20 people * 5 years managed 7 devs

2011.Jan/3 years

Delivered working prototype and won competition with MS and IBM prototypes for a Distributed Flow Management solution: multi-hop, no size limitation, efficient multi-party end2end encryption: java.

Outsourced project handover. Specification and implementation of programmatic API exposed for National Applications.

Refactoring legacy code to split GUI in presentation and backend

Installer for centrally and member states software (reduce deployment complains)

Categorize bugs in ones that require technical hardening and ones that need business reflection period

Deliver business layer analysis: Modeling, BPMN, Distributed Flow Management

Demo prototype to Unit Managers

Demo transport and messaging prototype to Technical Committee(June 2013)

Demo business layer prototype in front of Technical Committee(September 2013)

Playground (to foster protocol convergence) on internet

Solving political issues by creating tailored technology: any size transfer, multi-hop networks, online/offline clerk client, protocol flexibility depending on sector and flow, deploy anywhere

👥 Architecture, specification, analysis, design, build, ✂ eclipse, spring, ajax, html, css, java6/java7, development, build configuration, agile framework: wiki/confluence,subversion/svn/git, maven, jboss, weblogic, LDAP, playframework, svn/git, continuous integration server/bamboo/Jenkins, lead developer, technical lead Jenkins and Bamboo, confluence, jira

Team Leader / Project Manager – Xoom / Gemini Solutions

2006.May/4.5 years

Money Transfer - adapt different banking systems - xoom.com (bought by paypal)

lead 12 senior engineers * 3 years

Delivered banking integration framework for money transfer for the Silicon Valley startup.

👥 team leading, coaching, project management, analysis, ✂ eclipse europe, spring framework, hibernate, java5, java6, design, build configuration, migration perforce, maven

Senior Software Engineer – Alvarion

2005.Feb/1 year

NMS - a network management system for huge wireless devices networks

6 people * 12 months

👥 analysis, redesign, development, configuration (builds), code ✂ eclipse, hibernate, jboss, java5, SNMP, annotations, Perforce, migration, coaching Team Track, XML, XSL translators


Software Engineer – Redpoint

2003.Sep/17 months


Photos - website for social networking

2-3 people * 2 months

Delivered fast-paced various software solutions to Swiss clients. Learned interviewing, requirements, specification and fast feedback loops.



analysis, design, database design, development, algorithms research




eclipse, tomcat, MS SQL Server 2000, java, servlets, jsp, taglib, junit, SourceSafe, applets, sockets


Shop - website generically shop

3 people * 6 months

Delivered fast-paced various software solutions to Swiss clients. Learned interviewing, requirements, specification and fast feedback loops.



analysis, design, database design, development, algorithms research




eclipse, tomcat, MS SQL Server 2000, java, servlets, jsp, taglib, junit, SourceSafe, applets, sockets


Machine Planner - processes planner for a factory production

2 people * 3 months

Delivered fast-paced various software solutions to Swiss clients. Learned interviewing, requirements, specification and fast feedback loops.



analysis, design, database design, development, algorithms research




eclipse, tomcat, MS SQL Server 2000, java, servlets, jsp, taglib, junit, SourceSafe, applets, sockets


WebInfoControl - applet interface for a monitoring application (sensors, relays, images, proprietary network protocol specifications and development)

4 people * 3 months

Delivered fast-paced various software solutions to Swiss clients. Learned interviewing, requirements, specification and fast feedback loops.



analysis, design, database design, development, algorithms research




eclipse, tomcat, MS SQL Server 2000, java, servlets, jsp, taglib, junit, SourceSafe, applets, sockets


Taxi - payment management application for a taxi company

2 people * 3 months

Delivered fast-paced various software solutions to Swiss clients. Learned interviewing, requirements, specification and fast feedback loops.



analysis, design, database design, development, algorithms research



eclipse, tomcat, MS SQL Server 2000, java, servlets, jsp, taglib, junit, SourceSafe, applets, sockets


Junior Software Engineer – Softwin

2000.May/3 years


Pixel - signature acquire application, recognition and authentication of human signature

2 devs * 10 months

Acquired research data from 60 people x 5 specimens.
Low false-positive and low false-negatives reached.
Used: Digital Signal Processing techniques, genetic algorithms, neural networks.




scientific research (documentation, research, terminology), analysis, design, development




Windows NT, Visual Studio .net, c++, cppUnit, java, jUnit, SourceSafe

Inventory Web ERP - Inventory Management Module, as a part of an ERP system

2 devs * 6 months



analysis, design, database design



Internet Enabled, Component Oriented, Web Based (JSP 1.2, Servlets, Enterprise Java Beans 1.1, Application Server - Jonas, Servlets Container - Tomcat 3.2.1, Web Server - Apache), Visual SourceSafe, Rational Rose

Conta Web ERP - Financial Management Web Module, as a part of an ERP system

15 people * 12 months

Helped database developers to migrate to object oriented development in java.




analysis, design, database design, development, testing




Internet Enabled, Component Oriented, Web Based (JSP 1.2, Servlets, Enterprise Java Beans 1.1, Application Server - Jonas, Servlets Container - Tomcat 3.2.1, Web Server - Apache), Visual SourceSafe, Rational Rose

System 3D Project - Project Management Module, as a part of an ERP system

7 people * 5 months



database design, development, testing



Designer 2000, Developer 2000 (Forms 6.0, Reports .0), Visual SourceSafe, Rational Rose