TOMASZ SUŁKOWSKI, PhD

Software Engineer

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EXPERIENCE

08/2022 – Present

Senior software engineer
Dualog

· Development of Dualog Move
(.NET, MassTransit over RabbitMQ, Azure S3 and SQS)

Technologies used: `.NET` `MASSTRANSIT` `AZURE`

08/2016 – 07/2022

Advanced senior software engineer & Product owner
Aptiv / Delphi

· Product and team management of web labeling tool
(Jira, Git, Azure, Docker)
· Development of web labeling tool
(Typescript, Angular, Node.js, MongoDB)
· Expansion of CARLA simulator to aid development of AI-related technologies
(Python, UE4, CARLA, NumPy, Numba, Pygame, OpenCV)
· Managing a team of 5 developers

Technologies used: `TYPESCRIPT` `PYTHON` `MONGODB`

Senior software developer & Team leader
Aptiv / Delphi

· Design and development of automatic lane pre-labeling tool
(C++ 14, OpenCV)
· Design and development of various internal applications: desk and parking space assignment, shuttle bus tickets
(.NET 4.5, ASP.NET MVC, EF, WinForms, Xamarin)
· Development of ORCAS – Data visualization tool
(.NET 2.0/4.5, WinForms, Rx)
· Mentoring a team of 3 .NET developers

Technologies used: `.NET` `ASP.NET` `XAMARIN`

07/2015 – 07/2016

Senior .NET developer
Low cost travel group

· Design and development of Merlin – property management solution
(ASP.NET Web API, MongoDB, AngularJS, Solr, JustMock)
· Design and development of Connectivity API - OTA property channel manager
(.NET 4.5, Kafka, Cassandra, ASP.NET Web API)
· Recruitment of .NET developers

Technologies used: `.NET` `ASP.NET WEB API` `CASSANDRA` `MONGODB` `SOLR`

10/2014 – 06/2015

Software developer
Sabre

· Development of FormatFinder / eServices portal
(ASP.NET 4.5, Sitecore, Oracle DB, Solr)
· Maintenance of legacy agency eServices project
(ASP.NET 1.1, Oracle DB)

Technologies used: `ASP.NET` `SITECORE` `ORACLEDB` `SOLR`

12/2012 – 03/2014
(Additional job)

.NET developer
Meron

· Development of GTS – internal time/resources manager
(.NET 4.0, Silverlight 4, EF 4, MSSQL)

Technologies used:
.NET   ENTITYFRAMEWORK   MSSQL

11/2010 – 09/2014

Software developer
IHS

· Development of Phoenix CMS
(.NET 4.5, Quark QXPS+QPP, XSLT, MSSQL)

· Development of Connect iPad client
(obj-C, Xamarin)

· Development of Castle/Connect information portal
(ASP.NET MVC 4, MSSQL, NHibernate, Rhino Mock)

· Development of ContentTool system
(.NET/ASP.NET 3.5, MSOffice Interop, MSSQL, XSLT)

Technologies used:
.NET   ASP.NET   NHIBERNATE   MSSQL

02/2010 – 08/2010

.NET developer
IDMSA

· Design and development of automatic stock market playing system
(.NET 4.0, WCF, WF 4, MySQL)

Technologies used:
.NET   WCF   WF

10/2009 – 02/2010

.NET developer
IT-IS

· Development and maintenance of policy continuation project
(.NET 2.0, WF 4, WCF, MSSQL 2008)

· Development of cPortal project for Compensa
(ASP.NET 3.5, MSSQL 2008)

· Development of Ewium project for Vienna Finanse
(ASP.NET 2.0, MSSQL 2008)

Technologies used:
.NET   ASP.NET   WF   WCF   MSSQL

06/2008 – 08/2009

.NET developer
ITIGO Sp. z o.o.

· Development and maintenance of Petrostation project for Lotos
(.NET 2.0, WPF, WCF)

· Development of iPegaz project for Hestia
(ASP.NET 2.0, MSSQL 2005)

· Development of fuel station service project
(.NET 2.0, DevExpress XAF)

· Development of MOLP and Itigo licences portal project
(.NET 2.0, DotNetNuke, DevExpress XPO)

Technologies used:
.NET   WPF   WCF   MSSQL

11/2006 – 06/2008

C# programmer
C.A.R. Board

· Development and design of ArchiveIT
(.NET 2.0, WinForms)

· Development and design of MarsMultiMonitor
(Borland C++ Builder, DB2)

Technologies used:
.NET   WINFORMS

EDUCATION

2017 – 2023

PhD in Computer Science
Silesian University of Technology

· Doctoral thesis: Implementacja algorytmu autonomicznej jazdy w symulowanym ruchu ulicznym (Autonomous driving algorithm implementation in simulated traffic)

· Research:

Autonomous Driving Using Fluid Flow Simulation (2022) ✎

Dynamic Trajectory Planning for Autonomous Driving Based on Fluid Simulation (2019) ✎

In Search of the Ultimate Autonomous Driving Simulator (2018) ✎

2003 – 2008

MSc in Computer Science
University of Gdańsk

· Master's thesis: Symulacja ruchu ulicznego (Traffic simulation)
TrafficSym github repository ✎

· Modules included: Mathematical Analysis, Discreet Mathematics, Combinatorics, Software Engineering (Including Object Oriented Theory), Information Systems and Database Technology, Networks and Communication Systems, Operating Systems, Systems Architecture, Artificial intelligence, Parallel computing

PATENTS

🚗 **US20220289202A1**
Vehicle Movement Sensor for Autonomous Driving

LANGUAGES

Polish   Native

English   C1 Proficient

German   A1 Basic

INTERESTS

🚗 **Motorsport**
Practice and theory of drift and grip driving.

⚙ **Simulation**
Ability to experiment without complex preparations and high costs.

🌐 **Artificial intelligence**
Simple concept that solves complex problems.