# **Curriculum Vitae**

#### **Personal/Professional Information**

Title	<b>MSc</b> in <b>Computer Engineering</b> ( <b>5 years, full-time</b> ) at Wroclaw University of Technology (Leading Technical University in Poland)		
	<b>Master Thesis</b> : Scheduling tasks on parallel machines with resource constraints (in <b>C/C++</b> )		
	Certified SAP ABAP Software Developer		
Positions	<ul> <li>Senior C/C++ Software Developer (Games, DSP, Audio Plugins, Optimization, Win/Linux, Embedded, ERP) (5+ years)</li> </ul>		
	✓ Senior SAP ABAP Software Developer (9+ years)		
	✓ Python Developer (2+ years)		
	<ul> <li>Musician/Composer/Music Producer/Pianist (NI, Steinberg Cubase, Audacity, Ableton Live, MAX/MSP, FAUST etc.) (5+ years)</li> </ul>		
Technologies	✓ Modern C/C++11/14/17 (GCC, MSVC)		
Know-how	✓ STL, BOOST, QT, JUCE		
Main interests	✓ Qt Creator/Visual Studio/XCode		
	✓ Low latency, Multi-threading		
	✓ Algorithms and Data Structures		
	✓ Clean Code, DRY, KISS, SOLID		
	✓ Maths (Calculus, Linear Algebra, Statistics)		
	✓ Python (NumPy, scikit-learn, Pandas, Matplotlib, TensorFlow)		
	✓ Boost Test, Google Test, TDD		
	✓ Maple, MATLAB, Octave, Excel		
	✓ MySQL, Oracle		
	✓ Digital Signal Processing (DSP)		
	✓ Git, GitLab, SVN, CI, TDD/BDD		
	✓ Jira/Redmine Management Systems		
	✓ AI/Machine Learning/DL Algorithms		
	✓ Quantitative Finance, HFT		
	✓ Linux OS Programming (Bash, GCC, GDB)		
	✓ HTML5, CSS, JavaScript		
	✓ SAP ABAP Object Oriented		

Industries	✓ Music Business
	✓ Gaming
	✓ Academia
	✓ FinTech
	✓ Audio Engineering (Music Business)
	✓ Pharmaceutical
	✓ Energy/Manufacturing(hydropower)
	<ul> <li>Production (glass, plastic, gypsum, insulation wool and other building materials)</li> </ul>
	<ul> <li>Energy (transmission and distribution of electricity)</li> </ul>
	✓ High Education
	✓ Steel and Mining
	<ul> <li><math>\checkmark</math> Oil/Petroleum (plastics, chemicals and refining)</li> </ul>
	✓ Mining/Production (Copper and Silver)
	✓ Chemical
	✓ Catering and Hotel Management
Language Skills	English, Polish(native)

### Education

Date of Graduate	Institution	Degree
2015	Nokia Solutions and Networks	Certificated in Practical Aspects of Software Production:
		Agile/Scrum
		Subversion/Git
		Continuous Integration
		• Jenkins
		Python Programming
2006	SAP AG	Certified ABAP Developer
2001	Wroclaw University of Technology	M.Sc. in Computer Engineering
		Speciality:
		Applied Computer Engineering
1992	Katowice College of Technology	Dip. Electronic Technician
		Speciality:
		Computer Programming
1990	Bielsko-Biala High School of Electronics	Speciality:
		Electronics

## **Work Experience**

	Client/Project List		
2020 – project suspended	Heckmann GmbH – Senior C++ Software Developer (direct contract role with client, Berlin, GERMANY)		
(full-time contract)	Wave Table Graphic User Editor (QT/QML, VST SDK, JUCE)		
	<ul> <li>Audio plugins (DSP, numerical methods)</li> </ul>		
uhe	Linux Audio Plugin Support		
2018 – 2020 (full-time contract)	WAZDAN Ltd. – Senior C++ Software Developer - Mathematician (direct contract role with client, Birkirkara, MALTA)		
	<ul> <li>Design and implementation cutting-edge server gaming solutions (desktop tools, QT/QML, UI/GUI)</li> </ul>		
WAZDAN	<ul> <li>Design (logic, statistical and probabilistic design) and implementation of games (C++, Python) on the server side</li> </ul>		
	<ul> <li>Testing, documenting and preparing games for the certification process</li> </ul>		
2011 – 2018 (full-time)	<b>ROCHE – C++ Software Developer/Senior ABAP</b> <b>Software Developer</b> (contract role with SQ1 Resources, London, UK)		
square one			
	<ul> <li>SAP ECC 6.0 HCM Chris Project: Migration from SAP HCM to Workday, Switzerland, Poland         <ul> <li>✓ Data Extraction/Cleansing from the SAP HCM system</li> <li>✓ SAP Interfaces (C++, RFC, IDoc)</li> <li>✓ Data validation/transformation using mapping &amp; transformation rules (C++/Python)</li> </ul> </li> </ul>		
	<ul> <li>Workday, Switzerland, Poland</li> <li>✓ Data Extraction/Cleansing from the SAP HCM system</li> <li>✓ SAP Interfaces (C++, RFC, IDoc)</li> <li>✓ Data validation/transformation using mapping &amp;</li> </ul>		
	<ul> <li>Workday, Switzerland, Poland         <ul> <li>Data Extraction/Cleansing from the SAP HCM system</li> <li>SAP Interfaces (C++, RFC, IDoc)</li> <li>Data validation/transformation using mapping &amp; transformation rules (C++/Python)</li> </ul> </li> <li>SAP ECC 6.0 Clara Harmony Integration (Logistics WM): Integration between SAP ERP system and SAP Decentralized WMS,</li> </ul>		
	<ul> <li>Workday, Switzerland, Poland         <ul> <li>Data Extraction/Cleansing from the SAP HCM system</li> <li>SAP Interfaces (C++, RFC, IDoc)</li> <li>Data validation/transformation using mapping &amp; transformation rules (C++/Python)</li> </ul> </li> <li>SAP ECC 6.0 Clara Harmony Integration (Logistics WM): Integration between SAP ERP system and SAP Decentralized WMS, Brazil, Poland         <ul> <li>SAP NetWeaver Remote Function Call (RFC) Software Development Kit (C++ SDK)</li> </ul> </li> </ul>		
	<ul> <li>Workday, Switzerland, Poland         <ul> <li>Data Extraction/Cleansing from the SAP HCM system</li> <li>SAP Interfaces (C++, RFC, IDoc)</li> <li>Data validation/transformation using mapping &amp; transformation rules (C++/Python)</li> </ul> </li> <li>SAP ECC 6.0 Clara Harmony Integration (Logistics WM): Integration between SAP ERP system and SAP Decentralized WMS, Brazil, Poland         <ul> <li>SAP NetWeaver Remote Function Call (RFC) Software Development Kit (C++ SDK)</li> <li>Interface SAP backend systems (IDoc, C++, RFC)</li> </ul> </li> <li>SAP ECC 6.0 SUN2SAP: SUN2SAP- FI/CO/MM Implementation &amp;</li> </ul>		
onie	<ul> <li>Workday, Switzerland, Poland         <ul> <li>Data Extraction/Cleansing from the SAP HCM system</li> <li>SAP Interfaces (C++, RFC, IDoc)</li> <li>Data validation/transformation using mapping &amp; transformation rules (C++/Python)</li> </ul> </li> <li>SAP ECC 6.0 Clara Harmony Integration (Logistics WM): Integration between SAP ERP system and SAP Decentralized WMS, Brazil, Poland         <ul> <li>SAP NetWeaver Remote Function Call (RFC) Software Development Kit (C++ SDK)</li> <li>Interface SAP backend systems (IDoc, C++, RFC)</li> </ul> </li> <li>SAP ECC 6.0 SUN2SAP: SUN2SAP- FI/CO/MM Implementation &amp; Support Development, Brazil, Poland</li> <li>SAP SCM 7.0 APO Project: UFINC - SCM/APO Implementation &amp;</li> </ul>		

2014 – 2017 (part-time)	ITApps – C++ Software Developer/Python Development/Embedded Systems (self-study, r&d, Wroclaw, Poland)
	✓ Machine Learning/Deep Learning/ANNs
	<ul> <li>✓ FinTech (Fixed Income, Risk and Derivatives)</li> </ul>
	✓ Linux System/Kernel Programming
	✓ CUDA/GPU Programming
	✓ X86/ARM assembler
	✓ OS Dev
	✓ Embedded systems (Arduino, Raspberry PI)
2007 – 2010	SIEMENS - Senior Software Developer
(full-time)	• <b>SAP ERP 4.6 Template Project (PP):</b> Voith Siemens Hydro Power Generation, Voith AG, Heidenheim, <b>Germany</b>
SIEMENS	✓ SAP PP
	✓ Core ABAP Development
	✓ Testing
	✓ Documentation
	• SAP ERP 4.6 SCD Migration Project, Poland
NYDRO POWER GENERATION	✓ Data Migration
	✓ Thebis
	✓ LSMW
	<ul> <li>✓ Core ABAP Development</li> </ul>
	<ul> <li>SAP ERP 4.7 Maintenance Project: EnergiaPro S.A., Wroclaw, Poland</li> </ul>
ENERGIAPRO	✓ Core ABAP Development
Koncern Energetyczny	✓ SAP HR
	✓ Analysis
	✓ Logical Databases
	✓ Testing
	✓ Documentation
	• SAP ERP4.7 Project: Jagiellonian University, Cracow, Poland
where	✓ SAP FI, FI-TV, MM, SD, HR
	✓ Adobe Forms
W KRAKOWIE	✓ SAPScript
	✓ Smart Forms

2006 – 2007 (full-time)	<b>ITECS – Senior Software Developer</b> (contract role with Hudson, London, UK)
Hudson	<ul> <li>SAP ERP R/3 Project: Leverage Project, SIDMAR Arcelor Group, Gent, Belgium</li> <li>✓ SAP SD, MM, WF</li> <li>✓ Dialog and Report Programming</li> </ul>
ITECS	<ul> <li>✓ OO ABAP</li> <li>✓ ALV</li> <li>✓ IDOC</li> <li>✓ Scheduling Agreement</li> <li>✓ Call transaction</li> <li>✓ Bug Debugging</li> <li>✓ Turk</li> </ul>
SIDMAR Arcelor Group	<ul> <li>✓ Testing</li> <li>✓ Documentation</li> <li>✓ Technical Specification</li> <li>✓ SAP Script</li> <li>✓ Interfaces</li> </ul>
2003 – 2006	CAPGEMINI - ABAP Developer, Wrocław, Poland
(full-time)	• <b>SAP_ERP <u>R/3 Project</u>: BASELL ABAP Factory, Basell GmbH,</b>
	Germany ✓ LSMW ✓ IDOC ✓ ALV ✓ SAP Script ✓ RFC ✓ Interactive Report ✓ Interfaces ✓ Dialog Programming
<b>Bolyolefins</b>	<ul> <li>SAP R/3 Project: GLOBE Project Roll-Out, Basell USA Inc., USA</li> <li>SAP FI,CO, MM, SD, WM, PP</li> <li>Call transaction</li> <li>Implementation of customer functionality in a Railcar Management Area</li> <li>Interface Programming (e.g. Scale Interface)</li> <li>SAP Script</li> <li>User-exit</li> </ul>
2002 – 2003 (full-time)	PSP Audioware, C++ Software Developer, DSP Audio Engineer (full-time job, Warsaw, Poland)
IT'S THE ROUND THAT COUNTRY PROFESSIONAL BOUND FRONTERS	<ul> <li><u>Project</u>: GUI AUDIO DSP Plug-in PSP78 – Stereo Phaser (VST SDK, User Interface)</li> </ul>

2001 – 2002 Fredheim Helsesenter	<ul> <li>Stiftelsen Hjertegod Foundation, English Training,</li> <li>Kongsberg, Norway</li> <li>English Training</li> </ul>		
2000 – 2001 IIII	Wroclaw University of Technology, C/C++ Software Developer, Wroclaw, Poland		
Wrocław University of Technology	<ul> <li><u>Project</u>: Discreet Optimisation (Scheduling tasks on parallel machines with resource constraints)</li> </ul>		
1998 – 2000 (full-time)	IMG Information Management Poland, SAP ABAP Developer, Consultant, Wroclaw, Poland		
IMG Poland KGHM Polska miedź s.a.	<ul> <li>SAP R/3 Project: KGHM Polska Miedz S.A., Poland         <ul> <li>✓ Report programming (MM, SD, FI, CO)</li> <li>✓ dialog programming</li> </ul> </li> </ul>		
	<ul> <li>✓ call transaction</li> <li>✓ documentation</li> <li>✓ building interfaces</li> <li>✓ SAP standard modification</li> </ul>		
ROKITA	<ul> <li>SAP R/3 Project: PCC ROKITA S.A., Poland</li> <li>Report Programming (MM, SD)</li> <li>Dialog Programming</li> <li>SAP Script</li> <li>User-exit</li> <li>SAP Standard Modification</li> <li>Documentation and Specification</li> </ul>		
SV catering & services	<ul> <li>SAP R/3 Project: SV-Service, Switzerland</li> <li>Report and Dialog Programming</li> <li>MM, SD</li> <li>Data Transfer</li> <li>Call Transaction</li> <li>Testing</li> <li>Documentation</li> </ul>		
SAINT-GOBAIN POLFLOAT	<ul> <li>SAP R/3 Upgrade Project: Polfloat Saint-Gobain, Poland</li> <li>✓ Upgrade of SAP R/3</li> <li>✓ Interface Programming</li> </ul>		
1997 – 1998	Gen Computers – C/C++ Software Developer, Wroclaw, Poland		
	Student Internship (Warehouse Management & Sales System)		

#### Workshops & Professional Trainings

- Coursera, 2017: Machine Learning
- Coursera, 2016: HTML5/ CSS3/JavaScript
- NOKIA Solutions and Networks, 2015, Certificated in Practical Aspects of Software Production:
  - ✓ Agile/Scrum
  - ✓ Subversion/Git
  - ✓ Continuous Integration,
  - ✓ Jenkins
  - ✓ Python Programming
- Siemens Sp. z o.o., 2009 Internal training Overview of SAP RM (4d)
- Siemens Sp. z o.o., 2009 Internal training IS-U Data Migration (2d)
- Siemens Sp. z o.o., 2007 Internal training and self-learning based on the following official SAP Trainings:
  - ✓ HR350 Programming in HR
- Capgemini Poland, 2004 Internal training and self-learning based on the following official SAP Trainings:
  - ✓ BC401 ABAP Objects (3d)
  - ✓ BC425 Enhancements and Modifications (2d)
- Capgemini Poland, 2003 Internal training and self-learning based on the following official SAP Trainings:
  - ✓ BC415 Communication Interfaces in ABAP (2d)
  - ✓ BC411 Advanced ABAP Programming (2d)
  - ✓ BC490 ABAP Performance Tuning (2d)
- Lotus Notes IMG Information Management Poland, 2000 (2d, workshop)
- Business Process Reengineering (BPR) IMG Information Management Poland, 2000 (3 days, workshop)
- Overview of MM- IMG Information Management Poland, 2000 (3d, workshop)
- Overview of SD- IMG Information Management Poland, 1999 (3d, workshop)
- Overview of FI and CO IMG Information Management Poland, 1999 (3d, workshop)
- ABAP/4, SapScript, ABAP Workbench, ABAP Dictionary, Techniques of List Processing, Programming User Dialogs, Programming Database Updates, Data Transfer - IMG Information Management Poland, 1999 (10 days, workshops);
- PROMET Methodology IMG Information Management Poland, 1998 (1 day, lecture)