



# Alexey Balz

ML Research Engineer · NLP

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## PROFILE

Accomplished IT Engineer with over 4 years of experience in Software Testing, Data Analysis, and Python Development. Proven Expertise in Automation Solutions, Data Visualization, and Operational Workflows. Strong Commitment to Quality Assurance and Cross-Functional Collaboration. Focused on ML/NLP Roles. Demonstrated high Empathy through building a Psychological AI Assistant that supports users with care and sensitivity.

## EMPLOYMENT HISTORY

### IT Engineer

Nov 2021 – Present

Dresden

Racyics GmbH

- Designed and implemented software solutions enhancing operational performance through Python automation and data analysis.
- Streamlined data analysis workflows, significantly reducing processing time and improving efficiency.
- Built and deployed data visualization program critical for chip accreditation at GlobalFoundries.
- Collaborated with cross-functional teams to improve system reliability and product quality.
- Conducted comprehensive testing and debugging ensuring optimal system performance.

### Software Tester

Aug 2019 – Jan 2021

Dresden

Joynext

- Validated software functionality across diverse testing methodologies, ensuring high-quality deliverables and rapid bug resolution.
- Executed comprehensive test cases, identifying and resolving critical software issues.
- Improved testing strategies, increasing product quality and reducing time to market.
- Partnered with developers to refine applications and provide actionable feedback.
- Documented test results and produced stakeholder reports.

## INTERNSHIPS

### Software Tester Automation

Sep 2020 – Feb 2021

Dresden

Joynext

- Implemented automated testing for predictive street data in navigation units using Robot Framework.
- Streamlined error detection through automation in GitLab CI/CD processes.
- Improved reliability of testing frameworks.

# EDUCATION

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<b>Geomatics</b>	<b>2017 – Aug 2022</b>
Hochschule für Technik und Wirtschaft Dresden	
Student organizations: StuRa (Elected faculty representative), FSR, faranto. Skills: Databases, Python, Computer Vision, Git, Linux, GIS	
<b>College of Engineering &amp; Built Environment</b>	<b>Sep 2019 – Feb 2020</b>
Technological University Dublin	
Focused on Python programming, cross-cultural teamwork, and problem-solving. Skills: Python, Visual Studio Code, Git	
<b>Applied Informatics and Mathematics</b>	<b>2015 – 2016</b>
Hochschule für Technik und Wirtschaft Dresden	
Developed time management and teamwork skills as student assistant. Skills: GitHub, Problem Solving, Programming, C	
<b>Applied Mathematics and Informatics</b>	<b>2007 – 2011</b>
Saint Petersburg State University	
Skills: Troubleshooting, Problem Solving	

# PROJECTS

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<b>prismalog</b>	<b>Mar 2025 – Apr 2025</b> Open Source
<i>High-performance logging library for psy-supabase</i>	
Enabling fast logging in multiprocessing/multithreading environments.	
<b>psy-supabase</b>	<b>Jan 2025 – May 2025</b> Personal Project
<i>Psychological AI backend</i>	
Leveraging Supabase, recognizing themes and psychological distress in therapeutic conversations.	

# CERTIFICATIONS

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<b>IBM Machine Learning</b>	<b>Mar 2025 – May 2025</b> Coursera
<i>Authenticity Verified</i>	
Exploratory Data Analysis · Machine Learning · Deep Learning · Reinforcement Learning	

# SKILLS

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<b>Technical Stack:</b>	Python (Programming Language) · PyTorch · SQL · Supabase
<b>Data &amp; Tools:</b>	Data Visualization · Git · Docker · CI/CD
<b>Areas &amp; Practices:</b>	RAG · Augmented Reality · Test Automation · AI/ML Architecture
<b>Soft Skills:</b>	Empathy
<b>Languages:</b>	English (Fluent) · German (Native) · Russian (Native) · Mandarin (Beginner)