
Barry de Graaff, B.Eng, B.Ed.



Passionate software and hardware engineer specialized in system integration and business reporting. With over 10 years working experience and an academic background in Micro Electronics & System design.

I am passionate about open source technologies, open standards, and data privacy, with a strong interest in leveraging AI on self-owned hardware. I have hands-on experience in training AI models using TensorFlow and enjoy tinkering with micro electronics and radio technology.

Work experience

ROC Mondriaan, Assistant Project Manager, since 2025

During the migration of the student information system from Magister to Osiris, I troubleshooted technical issues and provided solutions to ensure a successful transition. Developed complex SQL queries to support data migration. Rebuilt the SQL integration between the student information system and Exact financial software (ETL). Authored technical documentation for colleagues on utilizing REST APIs with PowerShell, enabling automation of creating and updating user accounts. Post migration, I am focusing on developing business intelligence reports.

Technologies and tools frequently used:

- Oracle Business Intelligence Publisher BIP, Oracle SQL Developer
- SQL Server Management Studio, SQL Server Reporting Services, PowerShell

Zimbra, Software Developer, 2019 - 2024

As part of the Advanced Engineering team, I provided fixes for complex (security) bugs and developed new functionality in Java, React, C and Python. Specialized in SAML and multi factor authentication, integrations of 3rd party products and Zimbra add-ons (Zimlets). I also wrote technical guides that enabled partners to make their own Zimlets and integrations. Helped the security team with research, impact analysis, prioritization and forensic research.

Technologies and tools frequently used or implemented:

- Elastic Stack, React, GraphQL, Docker, Kubernetes, Rancher, Keycloak, Gitlab
- Postfix, Dovecot, Sieve, Milter, OpenDKIM, OpenDMARC, Apache, NGINX
- DNSSEC, DANE, Bind, Bash, C, Java, Python

Zeta Alliance, Co-founder and developer, 2014 - 2024

As founder I played a substantial role in setting up The Zeta Alliance, working together with other stakeholders I set up the organizational structure for this open-source organization.

As developer I realized projects by doing surveys and crowdfunding. Notable projects are the implementation of multi factor authentication, integrations with Rocket Chat, Nextcloud and support for OpenPGP encrypted email.

I also managed the technical infrastructure for Zeta Alliance, including DNS, Email and various websites. Moderated and maintained the Zimlet Gallery.

Technologies and tools frequently used:

- Java, JavaScript, Docker, Python, Bash, LDAP, Git, KVM, MySQL, PHP

Hivos, Senior System Administrator DBA, 2011 - 2019

As system administrator I am responsible for structuring the IT at technical and organizational level and helping Hivos to formulate a digital security policy. Notable successes include the implementation of SAML Single Sign On. Automated deployment with Ansible and the development of a user account self-service system.

In addition, as database administrator I am responsible for maintaining Oracle databases for the development and distribution of business reports and exports. Also I am responsible for technical management of the ERP system. I set up a DTAP environment for change management of the ERP system based on CentOS and Oracle 11/12.

Technologies and tools frequently used:

- Oracle SQL, Oracle PL/SQL, Tomcat, Nagios, Ansible, Bash, SVN
- Apache, NGINX, phpSimpleSAML, PrivacyIDEA, iptables, FirewallD
- IntelliJ IDE, Oracle SQL developer, iReport, JasperServer and Compiere ERP

Achievements:

- Implemented a data warehouse for business reporting with Oracle replication ETL
- Set up a DTAP and development procedures for development of BI reports
- Development of PL/SQL applications for XML based exports and Geocoding with Google Maps
- Implementation of a helpdesk ticket system with procedures
- Development of a Human Resource self service system with user provisioning
- Implemented a versioning system in trac/svn to keep track of system configurations

Professional training

2026	Oracle Business Intelligence Publisher (BIP) Training at CACI
2024	Introduction to Scrum Master Training
2024	DeepLearning.AI TensorFlow Developer via Coursera
2024	Natural Language Processing in TensorFlow for AI via Coursera
2023	Convolutional Neural Networks in TensorFlow for AI and Machine Learning via Coursera
2023	ChatGPT Prompt Engineering for Developers via deeplearning.ai
2023	<i>Amateur Radio license F via DLZA</i>
2020	React introduction
2019	Python Flask and Jinja at SpiralTrain
2019	Docker Enterprise Developers at Global Knowledge
2018	Python programming at SpiralTrain
2017	Nutanix Administration at Spinware
2016	Java Programming at Vijfhart
2014	Red Hat Certified System Administrator (RHCSA)
2013	Linux Security at Imatica
2012	Oracle SQL Fundamentals 1 and 2 at Vijfhart
2012	Oracle Database Administration DBA 1a and 1b at Vijfhart

Academic background

Bachelor of Electronic Engineering (B.Eng.)

Micro electronics and system design, The Hague University of Applied Sciences

Bachelor of Education (B.Ed.)

Electrical Engineering, Amsterdam University of Applied Sciences