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, enjoy tinkering with micro electronics and develop Apps for Ubuntu Touch mobile operating system.

Work experience

Freelance IT Consultant, since 2026

I advise on, implement and improve open-source collaboration platforms, including Linux systems, Nextcloud and email services. I design and troubleshoot secure sign-in, passkeys, user access and connections between different systems. My work includes software customization, automation, security reviews and resolving technical problems. I combine hands-on development with practical advice, documentation and support during implementation.

ROC Mondriaan, Assistant Project Manager, 2025 - 2026

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. Developed business intelligence reports in BI Publisher.

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. I specialized in SAML and multi-factor authentication, integrations with third-party products, and Zimbra add-ons (Zimlets). I also wrote technical guides that enabled partners to create their own Zimlets and integrations. I assisted the security team with research, impact analysis, prioritization, and forensic investigations.

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 crowdfundings. 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 was responsible for structuring the IT environment at both the technical and organizational levels and for helping Hivos formulate its digital security policy. Notable achievements included the implementation of SAML Single Sign-On, automated deployments using Ansible, and the development of a user account self-service system.

In addition, as Database Administrator, I was responsible for maintaining Oracle databases used for the development and distribution of business reports and data exports. I was also responsible for the technical management of the ERP system. I established a DTAP environment to support ERP system change management, based on RedHat and Oracle Database.

Technologies and tools frequently used:

- Oracle SQL, Oracle PL/SQL, Tomcat, Nagios, Ansible, Bash, SVN
- Apache, NGINX, SimpleSAMLphp, 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 Google Maps geocoding
- 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 via deeplearning.ai
2023	*Amateur Radio license F via DLZA*
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