
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 experimenting with AI tools like CodeLlama on Ollama.

Work experience

Synacor London, Software Developer, since 2019

As part of the Advanced Engineering team, I provide fixes for complex (security) bugs and write recommendations for strategic feature development for the product management team. Specialized in SAML, integrations of 3rd party products and Zimbra add-ons (Zimlets). I also write technical guides to enable our partners to make their own Zimlets and integrations and provide content to our marketing team to keep the Zimbra buzz going.

I help 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
- SAML and multi factor authentication

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 manage the technical infrastructure for Zeta Alliance, including DNS, Email and various websites. Moderator and maintainer for 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, FirewallID
- 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

Other employments

- Belfabriek, Webdeveloper / API specialist, 2011
- ROC Mondriaan, Application manager PeopleSoft Campus Solutions, 2008 - 2011
- PowerCraft Technology, Freelance Technical Consultant, 2007 - 2019

Professional 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>
2021	Zimbra Technical Sales Training Certification
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