

# Oz Nahum Tiram, M.Sc.

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Solving interesting problems, isn't only about finding the best algorithm, or choosing the right data structure or tool. Software is made for computers, but it needs to be understood by people, not only developers. My experience through the years has thought me that no buzz-word or new fancy technology can replace good team work. Good software projects are made with good tools and practices. Great software projects are made by great teams.

## PROFESSIONAL EXPERIENCE

### Consultant *Self-Employed*

March 2020 - Current

- Design and build Kubernetes clusters on Bare Metal, AWS and Oracle Cloud.
- Kubernetes and Cloud Native Consulting and Training.
- Build web applications using Python and Go.
- Co-Organizer official Kubernetes and official CNCF meetup for the region

Kubernetes OpenStack Python Docker Go-lang

### Senior IT Architect *noris network ag*

March 2018 - March 2020

- In-house and customer facing consultant for cloud native technologies.
- Plan and Deploy Kubernetes\Openshift clusters on OpenStack\vsphere
- Lead distributed development teams
- Lead developer of in house **Kubernetes distribution**
- Certified Kubernetes Administrator

Kubernetes Openshift OpenStack Python Docker Ansible git Go-lang

### Lead Developer *The Mobility House GmbH*

August 2016 - February 2018

- Write Jenkins CI/CD pipelines
- Plan and Deploy Kubernetes clusters on AWS
- Build Infrastructure with SaltStack, Docker, AWS
- Develop Micro-Services using Python, Go and RabbitMQ
- Interview and hire developers
- Mentor Junior Developers

Kubernetes AWS Python Pandas SaltStack Packer Docker Terraform git Go-lang

### Lead DevOps + Data Engineer *Plan-Net GmbH*

August 2014 - August 2016

- Lead migration from Subversion to Git
- Develop ETL jobs in python python-pandas and multiple other python libraries.
- Develop extraction jobs from MongoDB to tableau using C and Python APIs.
- Maintain a cluster of multiple MongoDB replication and shard nodes.
- Infrastructure planning and rolling with salt-stack.
- Build Web UIs for reporting using python-flask and JavaScript.

MongoDB Python Pandas NoSQL Tableau OpenVZ flask saltstack ipython git big-data

See older positions [at the end](#).

## EDUCATION

**M. Sc. Applied Env. Geosciences** *Universität Tübingen, Germany* October 2008 - October 2010

**Thesis Title:**

*Implementation of Sequential Non Iterative approach in MIN3P reactive transport code and comparison of Global Implicit Method, final GPA 1.6.*

**B.Sc. Geology** *Hebrew University, Jerusalem* October, 2003 - March, 2008  
*B.Sc. Final GPA 88/100.*

## RECENT OPEN SOURCE PROJECTS & CONTRIBUTIONS

I contribute to numerous open source projects in various forms. Recent examples are:

- [Kubernetes documentation, official Python client, Support of OpenRC and more.](#)
- [CoreDNS plugin for getting DNS records from NetBox](#)
- [Maintain Gentoo ebuilds](#)
- [Janet SQLITE binding](#)
- Submitting patches to Python's STL, SaltStack
- Report and triage bugs in multiple applications I use

The list is too long to include all here. Check my [Github profile](#) for more software project I work on.

## PUBLIC SPEAKING AND WORKSHOPS

- CICD with K8S and Gitlab, DevOps Conference, Berlin, 2021.
- Keynote - 30 Years of Python, Python Summit, Berlin, 2021.
- Designing and Building K8S clusters with kubeadm, DevOps Conference, London, 2020.
- Keynote - Going cloud - German Openstack days, Berlin, 2019.
- Advanced Flow Control in Python, Python Summit, Berlin, 2018, again in 2019.
- Secure Continuous Delivery in Kubernetes Clusters, DevOps Days, Berlin, 2018.
- Building a WSGI framework, PloneConf, Barcelona, 2017.
- Advanced Python workshop, PloneConf, Boston, 2016.
- Co-Organizer CNCF Meetup Nürnberg.

## LANGUAGE SKILLS

Mother language: Hebrew.

| Other languages*: | Understanding |         | Speaking | Writing |
|-------------------|---------------|---------|----------|---------|
|                   | Listening     | Reading |          |         |
| English           | C2            | C2      | C2       | C2      |
| German            | C2            | C2      | C2       | C2      |

\* Evaluation according to Common European Framework of Reference (CEF).

## DRIVING LICENSE

PKW, Private Auto, Class B.

## WORK PERMIT

German Citizen

Eligible to work and live in EU\Canada.

## SKILLS MATRIX

Level of skill:

6. I could write a book about it.
5. Used in multiple projects, contributed bug reports, submitted patches.
4. Have done more than 3 projects, involving more than 8000 line of code.
3. Used in production, worked on a few small scale projects.
2. Have done single small scale project, used it occasionally.
1. Took a course in the university, read a single book.

### Scripting\Dynamic Languages

| Language   | Skill Level |
|------------|-------------|
| Python     | 6           |
| BASH       | 4           |
| JavaScript | 4           |
| Groovy     | 3           |

### Compiled Languages

|         |   |
|---------|---|
| Go      | 5 |
| JAVA    | 3 |
| C       | 3 |
| C++     | 2 |
| Fortran | 2 |
| Pascal  | 1 |

### Markup & Web

|                         |   |
|-------------------------|---|
| LATEX                   | 5 |
| Sphinx\reStructuredText | 5 |
| HTML                    | 3 |
| CSS                     | 2 |

### Operating Systems

|                |   |
|----------------|---|
| Gentoo         | 5 |
| Red Hat\CentOS | 5 |
| Debian         | 5 |
| SuSE           | 4 |
| Windows        | 3 |
| FreeBSD        | 2 |
| OS X           | 2 |

### Python Frameworks & Development tools

|                   |   |
|-------------------|---|
| Flask\Bottle      | 5 |
| pytest            | 5 |
| Django            | 4 |
| Splinter\Selenium | 4 |
| Git               | 5 |
| Make              | 4 |

## Databases

|            |   |
|------------|---|
| MongoDB    | 4 |
| SQLite     | 4 |
| MySQL      | 3 |
| PostgreSQL | 3 |
| Oracle     | 1 |

## DevOps tools & Clouds

|                |   |
|----------------|---|
| Kubernetes     | 5 |
| SaltStack      | 5 |
| Ansible        | 4 |
| Jenkins        | 4 |
| AWS            | 4 |
| OpenStack      | 4 |
| Docker         | 4 |
| Packer         | 4 |
| Vagrant        | 4 |
| Gitlab CI/CD   | 4 |
| Docker-compose | 3 |
| Terraform      | 3 |

## OLDER POSITIONS AND PROFESSIONAL EXPERIENCE

### Backend Developer *Agnitas AG*

May 2014 - August 2014

Backend development of a high traffic E-Mail marketing SaaS.

- Develop internal tools using flask and sqlalchemy automate work flows.
- Extend continuous integration and introduce automated Selenium driven testing.
- Standardization of code packages, setuptools, coverage.py, code analysis & review.
- Manage work flows with Jira.
- Write sphinx documentation for python libraries developed in-house

MySQL linux flask big-data svn oracle git-svn bash unit-testing shell salt-stack redhat python

### Software Engineer, System Engineer *Science+Computing AG*

January 2011 - January 2014

My tasks as Software Engineer were:

- Develop different custom software solution for internal customers and external customers.
- Develop eclipse plug-ins that are part of OpenMDM project.
- Develop a Django front end for managing multiple user accounts in LDAP and Active Directory.
- Implement back-end scripts to synchronize AD user accounts and LDAP accounts.
- Setup and configure OpenLDAP.
- Work on multiple Django projects.
- Contribute to PDMCAE (Data management software in BMW written in C, C++, Perl, PISQL)

Django Java SQL LDAP AD JIRA OpenMDM Eclipse GIT MS Visual Studio Make C/C++

My tasks as System Engineer were:

- Install and Configure Windows and Linux (Red Hat 5,6 and CentOS) Workstations.
- Install and Configure HPC Clusters.
- Scripting: BASH, Python and Perl.
- Backup tool: TSM Client\Server support (On Windows and Linux).
- Hardware and Software RAID configuration.
- Monitoring (Nagios\RRDtool) Queuing systems (Sun Grid Engine\In house queuing system).
- Windows\Linux sharing (CIFS & SAMBA).
- 2nd level support for Engineers using CAE\CAD software.
- Install and configure MySQL databases.
- Install and configure SAN such as AutoFS , AMD and Windows DFS.
- Maintain LDAP servers.
- Actively responsible for packaging software in RPM, DEB and other packaging format.
- Responsible for as much as 5000 computers (Workstations and cluster nodes) for renowned customers such Daimler, Porsche and BMW.

SAMBA Red Hat Windows NFS Python Shell MySQL Perl

### Scientific Programmer *Uni. British Columbia, Vancouver.*

May, 2010 - Oct., 2010

- Implement a sequential version of a reactive transport model (Ground water flow + Chemical reactions) using an existing large and complex Fortran code.
- Write a collection of Python scripts: to submit jobs on different cluster hosts with different input files, to process the results and visualize them.
- The results of the code work and benchmarking comparing to previous versions were submitted as M.Sc thesis.

Fortran95 Makefile GCC Python L<sup>A</sup>T<sub>E</sub>X

**System Administrator, Python Programmer** *Uni. Tübingen, Germany* Oct. 2008 - April 2010

- Install and configure home brewed 2 Debian clusters with 20 compute nodes.
- Setup Subversion & Trac servers.
- Implement Python application to process GIS data and visualize the results (see blow MMSPy).
- Maintain firewalls to the Clusters and the TRAC server.

Debian Trac Subversion Python GDAL GIS IPTables PfSense

**System Administrator** *Rankabov, Israel* April, 2008 - August, 2008

- Configuration management of Windows, OSX desktops and Ubuntu\Debian Servers.
- Install and maintain Bugzilla for our clients.
- Package software (DEB format) for deployment.

Debian Packaging Bugzilla Ubuntu Shell Python OSX Windows