



# Martin Natano

## Curriculum Vitæ

### Work Experience

- since 2018 **Senior Software Developer**, *iMobility GmbH.*, Vienna  
Development and maintenance of the microservices-based backend for the Wegfinder app.  
My work includes the integration of partner APIs and the development of intermodal routing solutions.  
Technologies: Python, aiohttp, Postgres, Elasticsearch, OSRM, Kubernetes, Docker
- 2017-2018 **Senior Developer, Software Architect, Product Owner**, *RadarServices Smart IT-Security GmbH.*, Vienna  
Implementation and maintenance of multiple IT-security and SIEM related products for usage in-house.  
My work included designing two domain-specific programming languages for high-performance data processing and aggregation, and implementing their corresponding compilers.  
In addition to my development role, I was also responsible for planning the products on an abstract and on a technical level.  
Technologies: Python, Postgres, SQLite, C, Elasticsearch
- 2015–2017 **Lead Developer**, *Ethics Commission of the Medical University of Vienna*, Vienna  
Follow-up to the original ECS project started in 2010 with the goal to adapt the system to the needs of other ethics commissions.  
I was responsible for technical and product planning, software upgrades (Python 2 to 3, Django 1.2 to 1.8 and all other dependencies), replacing MooTools and a couple of outdated JS libraries with jQuery, replacing most handwritten CSS code with Bootstrap, and implementing many new features in the backend as well as in the frontend.  
Technologies: Django, Python, Postgres, jQuery, Bootstrap, Weasyprint, Celery, GPG
- 2012–2015 **Developer, Security Researcher**, *RadarServices Smart IT-Security GmbH.*, Vienna  
Implementation of network security solutions. Research & development in the security field regarding network anomalies, behaviour analysis and statistics.  
Technologies: Ruby on Rails, Python, C, Postgres
- 2011 **System Administrator**, *Spitzauer & Partner Rechtsanwälte GmbH.*, Vienna  
Deployment of a VOIP Solution.  
Technologies: CentOS, Asterisk
- 2010–2012 **Lead Developer**, *Ethics Commission of the Medical University of Vienna*, Vienna  
Design & implementation of a paperless office system (ECS) suited for the needs of the Ethics Commission of the Medical University of Vienna.  
Technologies: Django, Python, Postgres, MooTools, wkhtmltopdf, Celery, GPG

Mariannengasse 32/14 – 1090 Wien, Austria

☎ +43 699 17993901 • ✉ [natano@natano.net](mailto:natano@natano.net) • 🌐 <http://www.natano.net/>  
🐦 [martinnatano](https://twitter.com/martinnatano) • <https://gitlab.com/natano>

2009–2010 **Web Developer**, *Mjam GmbH*, Vienna  
Maintenance of the customer facing Django web service. Implementation of group orders and a Debian-based POS system.  
Technologies: Django, Python, PostgreSQL, Debian, wvdial

## Contributions to Open Source Projects

- 2021–Present **GrooveStats Launcher**, *Maintainer (Go)*
- Initial implementation
  - Porting to 3 different platforms: Linux, macOS and Windows
  - Maintenance
  - Integration with GrooveStats
- 2020–Present **Theme for StepMania 5: Simply Love**, *Maintainer (Lua)*
- Maintenance
  - Various bug fixes
  - Implementation of new features
  - Creation of and integration with the simply.training website
- 2016–Present **OpenBSD**, *Contributor (C, sh, make)*
- Improvements and bug fixes in filesystem code (ffs, mfs, fuse) and the generic VFS layer
  - Cleanup of integer width or signedness mismatches in the kernel
  - Reduce root privileges during make build and release in src and xenocara
  - Port of NetBSD's makefs(8) tool and integration into the ramdisk build
  - Co-authoring of mknod(8) rewrite
  - Assorted improvements to vi(1), mandoc(1), patch(1), ul(1) and make(1)
- 2013–2016 **Bitrig**, *Contributor (C, sh, make)*
- Improvements to the ps(1) utility, including hierarchical output and increased POSIX compliance
  - A device filesystem (devfs; not imported to the source tree)
  - TMPFS snapshots and various bug fixes
  - Assorted improvements to ksh(1), fdisk(8), acpithinkpad(4) and libc
  - Design of the website

## Security Research

2015 Discovery of two shell injection vulnerabilities in the BSD patch utility (CVE 2015-1416 and CVE 2015-1418) affecting OpenBSD, NetBSD, FreeBSD, DragonFly BSD, Minix and older versions of GNU patch.

## Open Source Projects

epl	Embeddable programming language	<i>C, ISC</i>
joymux	Joystick multiplexer for StepMania	<i>C, ISC</i>
organ	Hammond organ synthesizer	<i>C, ISC</i>

## Languages

German native  
English fluent

## Talks

2013	Implementing git-orm	<i>vienna.rb</i>
2013	The Pythonic Universe	<i>PyLadies Vienna</i>
2019	Workshop: asyncio	<i>PyDays Vienna</i>