I'm interested in all kinds of **Linux** jobs as long as it involves coding in the usual or in less common languages.

### 2. Personal Information

Name Adam Endrodi (born Endrődi Ádám) +36XX XXXX XXX, XXX@XXXX.hu Contact

Nationality Hungarian

Education master of engineering in information technology,

comprehensive background in mathematics

Specialization Linux/Unix, networking, security, development tools Experience embedded, telecommunications, system administration

advanced level English and some Finnish

LinkedIn profile http://www.linkedin.com/in/adam-endrodi

Twitter feed @NoSuchNetwork

Code repository http://github.com/enadam

# 3. Strengths

Language skills

- life cycle- and process-wide understanding of software engineering
- >15 years of C, C++, Perl, and Linux/Unix up from the foundations
- experience in a broad variety of domains of information technology
- top priorities are code quality, reliability and maintainability
- reviewing, testing, profiling, debugging, remote troubleshooting
- extensive use of scripting and automation
- supportive collaboration with designers, testers and managers

# 4. Experience

- Unix systems programming
- kernel-space programming
- network programming
- databases & their operation
- distributed systems and HA
- constrained environments
- virtualization

- IT security and cryptography
- OS & applications hardening
- safe and resilient coding
- multithreading complications
- functional programming
- understanding of the C toolchain and dynamic linking
- CLI, API and protocol design
- parsers and interpreters
- creating development tools
- test automation and CI
- writing accurate yet readable technical documentation
- mentoring colleagues, scrum

# 5. Keywords

- C, C++, assembly, ELF, yacc, T<sub>E</sub>X
- Perl, Perl XS, Python, Python-C, Lua
- regexps, advanced shell scripting
- gcc, gdb, STL, Qt, glib, GTK
- autotools, CMake, Debian/RPM packaging
- git, Subversion, Bugzilla, Jenkins

- SQL, PostgreSQL, MySQL, SQLite
- etcd, Redis, Couchbase, ConfD, YANG
- XML, REST, OpenAPI, SSL, PKI, X.509
- IPv4/IPv6, routing, netfilter, Postfix, ssh
- SCTP, DNS, LDAP, HTTP, iSCSI, Diameter
- Linux namespaces and containers, Docker

# 6. Employment History

- 2012/12-present: Nokia Networks, in the Mobile Networks business group of Nokia Corporation senior software engineer of the Linux Team working on the Open Telecom Application Server (TAS), a Volte solution component
- 2012/07-2012/12: BalaBit IT Security, the creator of syslog-ng and the Zorp firewall 3<sup>rd</sup> level support engineer



- 2010/09–2011/09: Collabora Ltd., the UK/Canada-based open source company consultant software engineer working on MeeGo, the operating system of the Nokia N9 and N950 smartphones in Helsinki, Finland
- 2007/09-2011/09: Blum Software Engineering LLC (defunct)
  software developer working on Maemo, the operating system of the Nokia N900 smartphone in Helsinki

#### **Present Roles**

- primary developer of the command line interface for TAS ( $\approx 10,000 \text{ LoC}$ )
- main author and maintainer of the Diameter load balancer ( $\approx 22,500 \text{ LoC}$ )
- reviewer of specifications, feature implementations and patches
- written many pre- and post-deployment scripts and utilities ( $\approx 18,000 \text{ LoC}$ )
- created lots of development tools for my and my team's benefit ( $\approx 10,000 \text{ LoC}$ )
- giving security advice on threat modelling, hardening, guidelines and on specific vulnerabilities

#### In the Past

For four years I worked in Helsinki at Nokia Devices' R&D facilities on the compositing window manager and the media application framework of the Linux-based Nokia N900 and N9 smartphones.

After that I joined BalaBit IT Security as 3<sup>rd</sup> level support engineer, where I triaged customer problems and actually fixed tricky bugs in the products of the company. I also helped the support team adopt the Kayako ticketing system by customizing and enhancing it to match and exceed the retired system's capabilities.

# 7. Some Older Projects

Project name: MenuGene

Univ. of Pannonia, Dept. of Information Systems 2004–2009

Description: Computer aided nutrition counseling system for experts and for the laymen. The user entered his/her nutrition needs (amount of protein, fat etc.) and received an optimal daily or weekly dietetic menu computed with a **genetic algorithm**. This was a university research program involving multiple institutions.

Duties: As the main software developer I wrote the generator engine and the underlying libraries in C++. The service had a simple **PHP** web interface and a **Perl** GUI. As by-product some **debugging tools** in **C** yielded as well. I also redesigned the database schema and migrated it from Oracle to **PostgreSQL**.

Project name: qbot

Univ. of Pannonia, Dept. of Information Systems 2005–2007

Description: Automated testing and student performance evaluation service designed for a course on computer networking. Students uploaded their C programs to be compiled and executed in a qemu virtual machine. There the submissions were placed under stress-test by feeding them randomized, fuzzy input sequences. The behavior of the programs was validated against the specification set out in the assignment. Through the web interface teachers could supervise everyone's activity, students could manage their uploads and watch the test execution in real-time.

Duties: I designed and implemented the system from top to the bottom in **Perl** augmented with **Perl XS**, and prepared many assignments complete with validators.

## 8. Personal Properties

- code readability and reliability are precious
- tests before making or merging a commit
- accepts others' style and respects their decisions
- thinks ahead and learns from mistakes
- hungry for knowledge and experience
- nothing is totally boring or useless

- let's do it attitude
- patient & listening
- determined & disciplined
- independent & passionate
- no compromise if possible, but ready for it if necessary

Beside professional self-improvement I'm interested in language, experimental psychology, social discrepancies and in the gender problem.