

1. Goal

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)
Contact	+36XX XXXX XXX, XXX@XXXX.hu
Education	master of engineering in information technology strong background in computer science and mathematics
Specialization	Linux/Unix, networking, security, CLIs, development tools
Experience	embedded, telecommunications, systems administration
Language skills	advanced level English and some Finnish
LinkedIn profile	https://www.linkedin.com/in/adam-endrodi
Code repository	https://github.com/enadam



3. Strengths

- life cycle- and process-wide understanding of software engineering
- > 18 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
- design, specification and code reviewing, testing, profiling, debugging, remote troubleshooting, root cause analysis, documentation, quick grok of code bases
- extensive use of scripting and automation
- supportive collaboration with architects, testers and managers



4. Experience

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|-------------------------------|---|---|
| • Unix systems programming | • IT security and cryptography | • API and CLI design |
| • kernel-space programming | • OS & applications hardening | • interprocess communication |
| • network programming | • safe and resilient coding | • parsers and interpreters |
| • databases & their operation | • multithreading complications | • creating development tools |
| • distributed systems and HA | • functional programming | • test automation and CI |
| • constrained environments | • understanding of the C tool-chain and dynamic linking | • writing accurate yet readable technical documentation |
| • virtualization | | |

5. Keywords

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| • C, C++, assembly, ELF, yacc, \TeX | • SQL, PostgreSQL, MySQL, SQLite |
| • Perl, Perl XS, Python, Python-C, Lua | • etcd, Redis, Couchbase, ConfD , YANG |
| • regexps, advanced shell scripting | • IPv4, IPv6, SCTP , netfilter, SSL, PKI |
| • gcc, gdb, STL, Qt, glib, GTK | • DNS, LDAP, iSCSI, Diameter , OpenSSH |
| • autotools, CMake, Debian packaging | • Docker, Kubernetes, qemu , OpenStack |
| • Subversion, git, GitLab, Jira, Jenkins | • scrum, Scaled Agile Framework (SAFe) |

6. Employment History

- **2012/12–present:** Nokia Software, in the [Cloud Native Core](#) product line of Nokia Corporation *senior specialist and technical lead*, working on the [Telecom Application Server](#) (Nokia TAS), a microservices-based VoLTE and 5G solution component
- **2012/07–2012/12:** BalaBit IT Security (acquired by [One Identity](#)), the creator of [syslog-ng](#) *3rd 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
- **2007/09–2010/09:** Blum Software Engineering LLC (defunct) *software developer*, working on [Maemo](#), the operating system of the Nokia [N900](#) smartphone in Helsinki

Present Roles

- Author of the Troubleshooting & Message Monitoring framework for **Kubernetes** in **Nokia TAS**, to be used by telco operators, Nokia technical support and R&D engineers (*Python*, *C*, $\approx 11,300$ LoC).
- Chief developer of the Command Line Interface of the product, a custom shell to access the operation and maintenance functions in a consistent and well-documented manner (*Python*, *jinja*, $\approx 17,000$ LoC).
- Earlier I made another CLI suite for TAS-SEE, a side-product of **Open TAS** (*Perl*, *shell*, $\approx 8,000$ LoC).
- I created most of the [Diameter](#) load balancer, an application-layer HA proxy (*C++*, $\approx 22,500$ LoC).
- Written many pre- and post-deployment scripts and utilities for **Open TAS** (*Perl*, *C*, $\approx 18,000$ LoC).
- Invented numerous development tools for my own and my team's benefit (*Perl*, *shell*, $\approx 10,000$ LoC). Many of them are publicly available in my [GitHub repositories](#).

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 3rd 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 counselling system for experts and for the laymen. Based on personal nutrition needs (amount of protein, fat etc.) the service prepared optimal daily and weekly dietetic menus computed with **genetic algorithms**. This was an [academic research program](#) involving multiple institutions.

Duties: As the main software developer I wrote the generator engine and the underlying libraries in **C++**.

Project name: qbot

[Univ. of Pannonia, Dept. of Information Systems](#) 2005–2007

Description: Automated testing and student performance grading 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 with validators.

8. Personal Properties

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|--|---------------------------------|
| • tests <i>before</i> making or merging a commit | • <i>let's do it</i> attitude |
| • thinks ahead and learns from mistakes | • patient & listening |
| • labours with high attention to details | • determined & disciplined |
| • nothing is totally boring or useless | • independent & self-sufficient |

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

September 15, 2019