

## 1. Goal

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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

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Name	Adam Endrodi (born Endrődi Ádám)
Contact	+36XX XXXX XXX, XXX@XXXX.hu
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
Language skills	advanced level English and some Finnish
LinkedIn profile	<a href="http://www.linkedin.com/in/adam-endrodi">http://www.linkedin.com/in/adam-endrodi</a>
Twitter feed	@NoSuchNetwork
Code repository	<a href="http://github.com/enadam">http://github.com/enadam</a>



## 3. Strengths

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- life cycle- and process-wide understanding of software engineering
- > 17 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

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|-------------------------------|---|---|
| • Unix systems programming    | • IT security and cryptography                          | • CLI, API and protocol design                          |
| • kernel-space programming    | • OS & applications hardening                           | • parsers and interpreters                              |
| • network programming         | • safe and resilient coding                             | • creating development tools                            |
| • databases & their operation | • multithreading complications                          | • test automation and CI                                |
| • distributed systems and HA  | • functional programming                                | • writing accurate yet readable technical documentation |
| • constrained environments    | • understanding of the C tool-chain and dynamic linking | • mentoring colleagues, scrum                           |
| • 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, <a href="#">ConfD</a> , YANG                    |
| • regexps, advanced shell scripting      | • XML, REST, <a href="#">OpenAPI</a> , SSL, PKI, X.509                    |
| • gcc, gdb, STL, Qt, glib, GTK           | • IPv4/IPv6, routing, netfilter, Postfix, ssh                             |
| • autotools, CMake, Debian/RPM packaging | • <a href="#">SCTP</a> , DNS, LDAP, HTTP, iSCSI, <a href="#">Diameter</a> |
| • git, Subversion, Bugzilla, Jenkins     | • Linux namespaces and containers, Docker                                 |

## 6. Employment History

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- **2012/12–present:** [Nokia Networks](#), in the [Mobile Networks](#) business group of Nokia Corporation *senior software engineer*, working on the [Open Telecom Application Server](#) (TAS), a VoLTE solution component, and its microservices-based successor, the [Nokia TAS](#)
- **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

- I'm laying down the foundations of the Troubleshooting Framework of the [Nokia TAS](#), which is meant to be used by telco operators, Nokia technical support staff and R&D engineers. I've also contributed to the Troubleshooting Guide significantly.
- Meanwhile I'm developing the Command Line Interface of the product (Python,  $\approx 11,000$  LoC).
- Earlier I made a CLI suite for TAS-SEE, a side-product of [Open TAS](#) (Perl, shell,  $\approx 8,000$  LoC).
- I wrote most of the [Diameter](#) load balancer and I'm still supporting it (C++,  $\approx 22,500$  LoC).
- Created many pre- and post-deployment scripts and utilities (Perl, C,  $\approx 18,000$  LoC).
- Added 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](#).
- Occasionally I assist the Security Architect with advice on hardening and by assessing CVEs.

## 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

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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++**.

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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 with validators.

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## 8. Personal Properties

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| • code readability and reliability are valued    | • <i>let's do it</i> attitude |
| • tests <i>before</i> making or merging a commit | • patient & listening         |
| • thinks ahead and learns from mistakes          | • determined & disciplined    |
| • nothing is totally boring or useless           | • independent & passionate    |

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

*October 4, 2017*