Ole André Vadla Ravnås

Senior Software Engineer

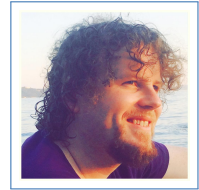☏ *+47 482 70 645*
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⌂ *www.frida.re*
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🐦 *oleavr*
⊙ *oleavr*

Experience

Vocational

2011–2014 **Co-Founder and Software Engineer**, *Soundrop AS*, Oslo.

Development of desktop app in Qt/Qml, front-end single-page apps for Spotify in HTML/CSS/JavaScript, and backend systems in Erlang and Go.
Detailed achievements:
- Automatic software update system with compression and delta-updates in C++;
- C++ playback system capable of real-time gapless playback;
- Advanced web animations in a push-based real-time context;
- Real-time playback logic built on top of Spotify's playback APIs;
- Implemented OAuth and REST APIs in Erlang;
- Maintained and co-developed Soundrop's first iOS app;
- Re-engineered Android app from the ground up.

2011–2011 **Director of Engineering**, *Tillit AS*, Oslo.

Reverse-engineering consultancy and part-time work on what later became Soundrop.

2006–2011 **Software Engineer**, *TANDBERG/Cisco*, Oslo.

Development of video conferencing software for Windows, Mac and Linux. Worked on everything from backend to video codecs, signaling protocols, and all the way up to the GUI layer.
Detailed achievements:
- Invented and implemented a DRM-scheme involving a modified PC BIOS;
- Inventor of patented ad hoc pairing method using ultrasound;
- Implemented video capture plugins for GStreamer on Windows and Mac;
- Became a developer on the GStreamer project;
- Ported software from embedded to desktop;
- Optimized OpenGL rendering on Windows and Mac;
- Co-developed tool for generating C++ and Python bindings from GObject/C APIs;
- Did a POC port to iPhone by reverse-engineering Apple's hardware codec APIs.

Miscellaneous

2010–2015 **Founder and Maintainer**, *www.frida.re*.

Created the Frida project out of my passion for scriptable cross-platform dynamic binary instrumentation.

2006–2009 **Founder and Maintainer**, *https://code.google.com/p/ospy/*.

Created the oSpy project to help me while reverse-engineering Microsoft ActiveSync and Windows Live Messenger.

2004–2005   **Founder and Maintainer**, *libmimic video codec*.
Reverse-engineered Microsoft's proprietary video codec used by Windows Live Messenger for webcam conversations. Re-implemented it in C and released as libmimic, which hit Slahdot in 2005:
http://tech.slashdot.org/story/05/04/05/0240236/logitech-msn-webcam-codec-reverse-engineered

2000–2002   **Founder and Maintainer**, *JBLinux*.
Created my own Linux distro from scratch. Maintained hundreds of packages. This distro was way ahead of its time, installing in just a few minutes and providing you with a streamlined configuration experience. Distributed on CD by two European Linux magazines.

Languages

Norwegian   **Mother tongue**

English   **Fluent**

Publications

Anatomy of a code tracer
https://medium.com/@oleavr/anatomy-of-a-code-tracer-b081aadb0df8.

Build a debugger in 5 minutes
https://medium.com/@oleavr/build-a-debugger-in-5-minutes-1-5-51dce98c3544.