

Torgil CV

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CAREER

IgniteIT AB (founder, consultant)

Software engineer@Qualcomm
Software engineer@Arriver
Software engineer@Veoneer

Cybercom (consultant - mobile radio modem platform)

Software engineer@Autoliv
Test developer@Ericsson BU Modems
Test developer@Ericsson (China)
Test developer@ST-Ericsson

ST-Ericsson (mobile platform - radio)

Test software developer

Flextronics (mobile phone production)

Test developer (SW and HW)

ROLE SUMMARY

Area

Infra / Configuration management
Predev demo & evaluation
Tiger team / Product quality assurance

Scope

Automotive, embedded drive policy SW
Automotive, embedded vision SW
Mobile phone - embedded SW
Mobile platform - reference design
Mobile phones - high-volume manufacturing

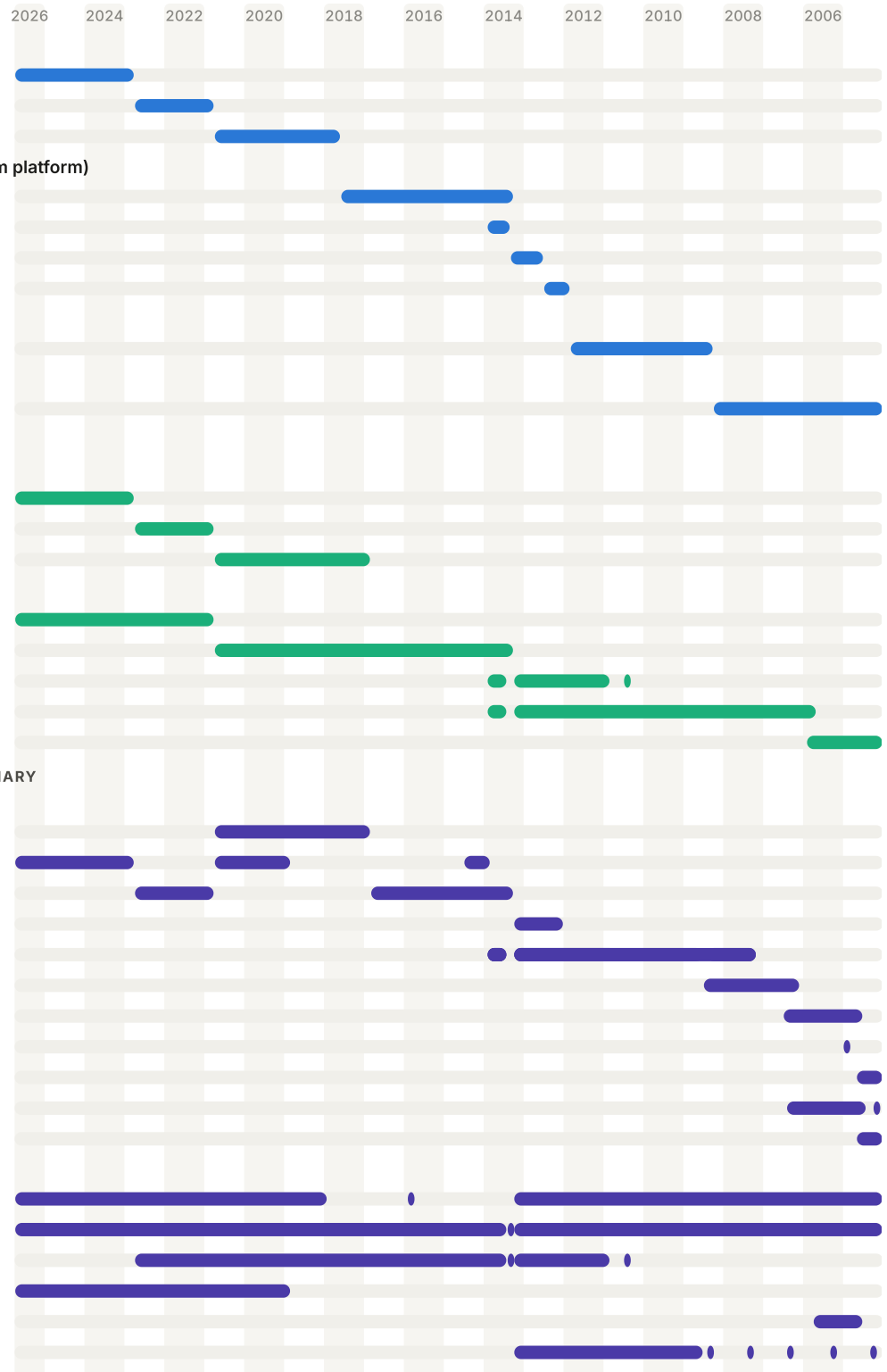
RELATED TECHNICAL EXPERIENCE - SUMMARY

Technical fields

Devsupport
Build system
Embedded framework
RF-TDSCDMA
RF-LTE/WCDMA/GSM
RF-WLAN
RF-Bluetooth
Acoustics
Vision/Display/Camera module
Audio/Analog
Connection/Logic

Main programming languages

C++
Python/NumPy/SciPy/...
C
Starlark (Python dialect)
C#
MATLAB



Assignments

- 2026**
2023
- **Qualcomm - Drive policy, SW variant management**
- Tmux LLM Bazel GitHub Zuul
- Evolved AI workflow from code assist, to complete engineering subtasks in parallel, persistent and recoverable AI sessions
 - Built a Git extension that handles dependent changes across many repositories as one workspace (Gerrit and GitHub)
 - Build system and SW variant support
 - Build graph analysis and visualization tools
- 2023**
2021
- **Arriver - Drive policy predev - demo & evaluation**
- C/C++ Bazel Protobuf Jinja iceoryx
- Implemented an embedded framework for rapid demo & evaluation deployments (team member)
 - Designed and implemented an SDK for the embedded framework
 - Made our SW interface build component configurable across multiple downstream projects (team member)
 - Raised the unit of automation from build targets to a reproducible graph of stateful workspaces (proof of concept)
- 2021**
2019
- **Veoneer - Build system migration project**
- Python Bazel GCC GoogleTest Coverage
- Multiple repositories connected as a 'virtual monorepo'
 - Single build graph including system builds/tests (multi-platform/configuration)
 - New build logic with product definitions separated from build tree (logical build graph)
 - QA tests and reports integrated in build graph (reports in build tree)
- 2021**
2017
- **Veoneer - Devsupport / Analysis - Automotive vision**
- Elastic Bus analyzers Infineon/DAS AUTOSAR Jupyter
- Driving improvement of integration tools, debug tools and tests
 - Development and troubleshooting support
 - Root cause analysis on system-level issues
- 2017**
2014
- **Autoliv - Embedded software framework - Automotive vision**
- C/Python Gerrit SCons INTEGRITY RTOS Linux/eBPF
- Software development of application/algorithm framework (team member)
 - Python library for introspection of compiled libraries
 - Test framework for unit tests in multi-threaded environments (race conditions)
 - Designed logical build system configuration language
 - Troubleshooting tools (data collection, analysis, visualization)
- 2014**
2009
- **Ericsson / ST-Ericsson - Test development - mobile radio chipset**
- C/C++/Python Radio testers OSE MATLAB Multi-standard RF
- Receiver measurements that cut measurement time for all LTE (4G) radio bands from a day to minutes
 - Receiver signal strength calibration time optimization by a factor of 10 to 20
 - Development of C-based algorithm library deployed on both PC and various embedded environments
 - Developed data collection sweep environment including algorithm, instrument- and HW control
 - Visualization tools for test-time breakdown
- [Patent US 8,862,084 ↗](#)
- 2009**
2006
- **Flextronics / Ericsson - Test development mobile radio chipset WLAN / BT**
- C++/Python BT-tester Software-defined RF Aeroflex PXle
- New electrical audio signal loop tests (test HW requirement + SW development)
 - New test framework architecture/design/implementation for test flow optimization (production tests)
 - Synthetic instrument (raw data directly to PC) test framework for radio measurements
 - Implementation of WLAN tests and calibrations
 - Framework for integration tests of test methods and instrument drivers
- 2006**
2005
- **Flextronics / SEMC - Test development mobile phone - WLAN / BT / Baseband**
- C++/C# Idefix VISA B&K PULSE PyTables/HDF5
- Evaluation of acoustic microphone measurement using B&K PULSE system
 - Adapting test fixture, SW tests/calibrations (audio, charging, connectivity, power, etc.) for new product
 - Offline production measurement database and analysis tools for high-volume production
 - Radiated BT radio power measurement including calibration to absolute reference (mode-stirring chamber)
- 2005**
2004
- **Flextronics / SEMC - Test development mobile phone - high-volume manufacturing**
- C++ Computer vision Image processing SVG NumPy/Matplotlib
- New camera module tests (focus, position, resolution - first autofocus camera project)
 - Adaptation of existing display tests
 - Tool for auto-generation of test images
 - Production tool for test station calibration (camera test, position/alignment of test hardware)
 - Prestudy of acoustic production tests - mobile phone project

Education

1997–2003 **Computer science** 180p · LiTH

1994–1996 **Teknologie Magister** 160p · LiTH

1991–1993 **Electrical Engineering** 80p · LiTH



● Software development 79.5p ● Telecommunication 12.5p
● Image/signal processing 32p ● Electrical engineering 76p
● Math 71.5p ● Other 29p