# SERTAÇ TÜLLÜK EMBEDDED SYSTEM DEVELOPER SOFTWARE ARCHITECT | PROJECT MANAGER

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# CAREER PROFILE

- Linux / Android based consumer / industrial product designer project manager.
- Senior level C / C++ / Shell Script developer
- Active Linux user / developer / Community Contributor since 1998
- Product / Business experience:
  - Industrial and Consumer level HMI Devices
  - Home Automation systems, Smart Home TouchPanels
  - DVB Set-Top-Box & TV Systems
  - Headless embedded linux devices (SoM, CoM, Carrier boards..etc)
  - 10+ years experience on Allwinner / RockChip / Amlogic / IMX / Intel platforms
  - 15+ years experience on SBCs (Single Board Computers) on development & debugging & testing
  - Loves to work on Linux and write technical documentation

## EXPERIENCE

#### AMLOGIC Inc / Istanbul - Remote / Since Jan 2023 Project Manager / Lead FAE

- Project Management of Amlogic customers
  - Smart TV and STB ARM SoCs
  - Android / Yocto / RDK
  - Device-Tree / u-boot / kernel / userspace
  - Board Bring Up and Field Application Engineering
  - JIRA Product Backlog Management
  - Onsite Customer Support

## **SIEMENS AG** / Istanbul - Hybrid / March 2022 - December 2022 Senior Software Architect

• Designed and implemented the OS architecture for **Simatic HMI Industrial Touchpanels**, utilizing Intel (x86) & IMX8 (ARM) SoC for enhanced performance.

# CANONICAL / Istanbul - Remote / March 2021 - March 2022

- Developer + Engineering Manager
  - Led the **Ubuntu Core** team, managing next-gen secure embedded Linux OS development.
  - Formed and led a world-class development team, successfully hiring and onboarding top talent.
  - Optimized boot time by 60%, improved installers, enhanced documentation, and resolved critical bug fixes, resulting in 50% efficiency improvement.

### SIEMENS AG / Istanbul - Hybrid / April 2018 - March 2021 Developer + Senior Software Architect

- Developed and optimized OS for Simatic HMI Industrial Touchpanels (Intel & IMX8 SoC)
  - Developed linux system services (C++/Protobuf/WAMP) for:
  - built-in and removable storage devices ( eMMC / SDcard / USB...etc)
  - serial Devices (RS485 / RS422)
  - systeminfo (uptime/loadavg/health status)
  - network services (dcp / lldp / snmp)
- Maintained Mentor Embedded Linux OS for Simatic HMI touchpanels.
- Optimized OS boot speed by 80%, reduced disk space usage by 35%, and enhanced system robustness, leading to improved overall performance



### INTERRA / Istanbul / July 2013 - April 2018 Developer + Engineering Manager + Product Manager

- Led and managed a team of 14 developers (HW/linux/Android/iOS) for 5 years.
- Developed Smart Home / Building TouchPanels running Android OS (Allwinner SoC):
  Home Automation Touchpanels (Android/Linux)
  - Hotel / Building Automation Touchpanels
- Developed Smart Home / Building Headless embedded products running Debian Linux OS: • SIP Server
  - Concierge Server
- Developed ARM Android based PCBA used in smart home systems . Worked as a developer for board bring-up, system services and architecture for all above products.
- Written GPIO libraries, Temperature, Ambient Light, Proximity Sensor library and applications ( C lang)
  Developed a remote management system that can control & monitor the products after sales ( Fleet
- Developed a remote management system that can control & monitor the products after sales ( Fleet management solution)
   Developed on OTA Undete solution for all above products
- Developed an OTA Update solution for all above products

#### HIREMCO / Istanbul / May 2006 - Jul y 2013 Developer + R&D Manager + Product Manager

- Lead a team of 19 developers (Mechanics/Electronics/OS/Userspace) for 7 years.
- Development of Turkey's 1st HD Linux DVBS2 Satellite Receiver / SetTopBox
  CHIPBOX
- Development of Turkey's 1st OTA Upgrade system over Turksat Satellite
  Hiremco OTA
- Development of world's first DVB STB with an onboard speaker
  Hiremco F1
- Developed more than 30 different DVB STB models during 7 years.

# **ORIENT ELECTRONICS / Gaziantep / Jan 2004 - April 2005**

# **Development Team Lead**

- Lead a team of 5 developers for 1 year
- Developed VCD/DVD players with Mediatek SoCs with Turkish OSD

# EDUCATION & TRAINING & LANGUAGES

**1997 - 2003 : Gaziantep University** Electrical / Electronics Engineering - GPA: 3.48 **Turkish**: Native **English**: C2

# **DEV SKILLS**

- C | C++ | ShellScripts | Markdown | GIT | Repo
- Open source software development (see github/gitlab repos)
- Some open source contributions:
  - https://linux-sunxi.org/Special:Contributions/Stulluk

# CERTIFICATES

Advanced C LANGUAGE – CSYSTEM (www.csystem.org) Advanced C++ LANGUAGE – CSYSTEM (www.csystem.org) CPSA-F – ISAQB (www.isaqb.org)

# **KEYWORDS**

C++, C, BASH, LINUX, android, board bring-up, board enablement, os porting, os optimization, gcc, clang, llvm, compiler, linker , assembler, gdb, stb, hmi, automation, debug, debugging, test, testing, embedded, arm, x86, debian, ubuntu, server, uboot, u-boot, grub, device tree source, linux kernel, initramfs, initrd, busybox, git, architecture, documentation, emmc, agile, scrum, development, x11, wayland, systemd, secureboot, i2c, spi, uart, ebpf, knx, automation, smart home, terminal, bash, script, documentation, container, docker, docker, lxd, touchpanel, dvb, UX, project management, product owner, project manager, product management, r&d manager, product manager...