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| |  |  | | --- | --- | |  | **Andrey Loshchilov**  Embedded Engineer / Tech Lead | | |
| |  |  | | --- | --- | |  | Profile Experienced HW Engineer with 3+ years in Embedded development, 7+ years of experience in Automated Production Test Systems architecture design and developing, soldering skills.  Skills and technologies, I work with:   * **C**/C++, Python. * UART, I2C, SPI, JTAG, Boundary Scan, Ethernet, BroadR-Reach, Bluetooth Classic, BLE. * STM32Fx/Gx/MP1x, ATSAM V7, NXP i.MX8, RK3588x, QCC302x. * AOSP, U-Boot, Kernel, Drivers, Test Firmware, FW updaters, Control and Monitoring, statistics and data analysis software. * Network Vector Analyzers, Spectrum Analyzers, Oscilloscopes, Logic analyzers, Signal generators, SDR. * Schematics, PCB layouts: Zuken CR-8000, P-CAD. | |  | Employment History **Principal SW Developer at SWTecNN, Nizhny Novgorod / UAE**  October 2021 — Present   * AOSP porting to custom boards, configuration and development. * uC Firmware for Microchip, Qualcomm QCC302x SOC. * Schematic diagrams analysis.   Completed projects:   * Bluetooth media controller FW. * Audio Modules monitoring suite FW. * Firmware for LTE Modem and Navigation Receiver interfacing controller. * AudioHAL Synchronous Audio output, DTB Overlay support U-Boot.  Lead Engineer (Production Test) at Topcon Positioning Systems, Moscow May 2015 — September 2021  May 2015 – 2018: Engineer; 2018 – Present: Lead Engineer.   * Automated test & measurement stand architecture design. * Discussion and coordination of architectural and design solutions. * Taking part in the new products bring-up process. * Developing SW & HW for Board-level production tests and for design verification purposes. * Developing Test Firmware for SPARC (LEON) and ARM CPUs. * Developing test software for OS Windows, Linux. * Development of schematic diagrams. * Diagnostic and investigation of failed devices, modules, components, and parts.   Completed projects:   * Debug access API for LEON CPU (UART, JTAG). * GNSS Simulator System (Control and monitoring, signal distribution network), providing enhanced repeatability of RF Tests. * Complete software set for STM32MP1 based test adapter (U-Boot, Linux, User-level software, and periphery drivers). * Service utilities for safe FW components update. * SDR (NI USRP) based simulator of Satellite-Based Augmentation System signals (Omnistar / Terrastar).  SW Engineer at Freelance / Pet Projects 2017 — Present   * Drone based gas leak detector data acquisition (gas detectors, GPS Receiver, Camera) system for ARM micro-PC. * Mobile gas leak detector data acquisition system for Windows PC. * Temperature monitoring data analysis and visualization utility for metallurgical plant usage. * STM32F7 based HIL (Hardware-in-the-loop) system for RF devices automated production test and qualification with TCP Server.  Engineer at Research Center SiriNN, Nizhniy Novgorod April 2014 — May 2015   * Automated test & measurement bench architecture design. * Developing HW and SW for RF-test equipment.  Field Application Engineer at Macro Group, Saint Petersburg October 2013 — April 2014   * Consulting customers on the use of their products of interest (area: RF and microwave technology)  RF Engineer at Kvarz, Research Institute, Nizhniy Novgorod July 2011 — October 2013   * Design and assembling of microwave passive devices, design of microwave structures. | |  | EducationMaster of Engineering, Nizhny Novgorod State Technical University n.a. R.E. Alekseev, Nizhniy Novgorod 2007 — 2013  **Master of Engineering.** Radio Engineering  **Bachelor of techniques and technology.** Design and Technology of Electronic Means. | | Details Telegram: [@aduff](https://t.me/aduff)  Email: [aduff@ya.ru](mailto:aduff@ya.ru)  Date of birth  20.02.1990, 34 y.o. Links <https://github.com/adufftpc>  <https://gitlab.com/aduff> Skills Teamwork  Readiness for local/international business trips  Soldering  Diagnostic  Problem Solving  Time Management  Hard Working  Ability to Learn Quickly  Ability to Multitask Languages  |  |  | | --- | --- | | English | | |  |  |  Hobbies Cycling, Skateboarding, Hiking, Ultimate Frisbee, Playing guitar. |
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