Isopogon Software – Senior Specialist Software Developer

Salary: Negotiable depending on experience. (GUIDELINE: 140-240k AUD / 85-145K €)

Conditions: Full time, permanent employment commencing March/April 2024.

Hours: 35 hours a week. Flexible hours with morning sync-up video calls.

Location: Headquarters is in Adelaide, Australia or remote work from home in Europe depending on experience. Occasional (5%) travel within your region or to head office to meet customers / to attend conferences is required.

Purpose of the position:

Performing custom software development, reverse engineering, systems debugging, software analysis, Android debugging, board bringup, firmware debugging, and binary analysis to add features and maintain embedded & mobile software.

Responsibilities and duties:

- You'll join our team working on developing hypervisors, reverse engineering, building debugging tools, and implementing features in existing software solutions and projects like browsers, bootloaders, kernels as well as usermode software
- You'll be exposed to many different software stacks and be required to review and understand the code to fix issues and improve reliability and security, add features and improve usability of various products.
- Porting Android and Linux to new smartphone devices, while developing and extending Board Support Packages for customers to continue to deliver new software
- Present findings and projects (English written/spoken) to colleagues and customers in an accessible and clear way
- Contribute to internal and external training and conferences to refine and hone your skill sets
- Designing and implementing algorithms to create and improve software programs and systems in mobile domains.

Work experience and skills:

Essential experience and skills

- 4+ years of software vulnerability research / code review experience, preferably in iOS or Android or embedded C/C++j
- Hypervisor, emulator, debugger and other embedded tooling development
- 6+ years of ARM reverse engineering using Binary Ninja/Ghidra or IDA plugin/architecture development
- Systems administration and Android or iOS app development
- ARM/Android BSP board bring-up experience
- Systems debugging on Android and other ARM platforms
- Advanced knowledge or experience with the software codebase of at least one browser engine, one mobile OS kernel and one bootloader/hypervisor is essential
- Knowledge of modern mitigations and software exploit techniques in order to better protect software systems is required.

Optional experience (nice to have)

- Hardware/board design
- Contributed to CyanogenMod/LineageOS or AOSP or Chromium/Linux projects
- CTF experience/vulnerability research experience.

Technologies, keywords and things our team are passionate about:

Linux (Android, embedded, desktop), XNU (macOS, iOS), WebKit (JSC)/Blink (v8) / Xcode, Android Studio, binja/IDA+bindiff, valgrind, lldb/gdb/windbg, git, cmake, ninja, capstone, C, C++, Objective C, ARM/x64/mips ASSEMBLER, JavaScript, Java, IDAPython, Lua, Perl, FPGA, Xilinx, reverse engineering, JDK, NDK, RTOS, VXworks, Xen, QEMU, LLVM/clang, ffmpeg, Binder, UEFI, aboot/LK, ghidra, gradle, Ghidra, gcc, AOSP, Gerrit, gitweb, windbg, EDK, unicorn, Ghidra, Sleigh, android tuning

A computer science degree is NOT required, but at least 5 years of proven industry experience with at least 5 of the 8 skills listed is a MUST for this position. We are looking for someone who is reliable, discrete, friendly, hardworking and determined to get the job done.

How to apply:

Please send your CV (as a PDF) and an expression of interest to our email: careers@isopogon.com with the job title as subject.