Sushil Agarwal

Vancouver, British Columbia https://www.linkedin.com/in/sushilagarwal/ sushil89@yahoo.com

Monday, July 17th, 2017

Hiring Manager
The National Research Council
Automotive and Surface Transportation Portfolio
Canada

Re: Automotive Software/Controls Application Engineer/Reference number (144-17-0296)

Dear Hiring Manager,

This letter is to express my interest in your posting on nrc-cnrc.gc.ca for an Automotive Software/Controls Application Engineer. With a Bachelor's degree in Technology in Computer Sciences and Engineering and twenty five plus years of industry experience in developing, enhancing, and maintaining embedded projects using C language in areas such as UNIX kernel, Edge router, Industrial firewall and communication protocols, I am confident that I will be an asset to The National Research Council by performing research and technology development in automotive and surface transportation sector.

Most recently while working with GE digital, I enhanced and maintained Linux based embedded firewall through writing protocol dissector in industrial communication space, hardening Deep Packet Inspection (DPI Engine) code and strengthening the standard data communication protocol such as TCP/IP to avoid potential evasions and vulnerabilities.

During my tenure with Ericsson Canada, I specialized in development of large scale embedded software for edge router which included, migrating UNIX applications from 32-bit IBM Power PC platform to 64-bit Broadcom MIPS processor for next generation controlled card. Additionally, I gained valuable experience working with multi-disciplinary teams spread out across Poland, USA and Canada.

Furthermore, while working with Lucent Technologies, I developed expertise in UNIX kernel code in areas including; defect fixing for complex multi-processor kernel (Single Instruction Multiple Data) and writing kernel extension to meet stringent five nine continuous availability requirement.

During my stay with C-DOT, a leading research and development scientific body which specializes in telecommunication, I led the porting of C.85 protocol, a proprietary protocol derived from x.25 LAPB, device driver from UNIX to mission-critical embedded environment by designing RTOS (priority based task scheduler), developing data transfer protocol between main board and the new board, implementing and testing interrupt service routines and designing 'lock/unlock' APIs for data consistency in multi processor environment. Additionally, I worked as a Product Coordinator of IOP-XL, a front-end M68010 based UNIX box in C-DOT Digital Switching System. As part of that role I scheduled and led performance studies, participated in internal validation processes, visited lead field sites and managed the customer support teams.

In conclusion, I am confident that with my designing and developing experience in vivid embedded software, ability to solve complex problems and familiarity with the data communication protocols alongside my strong communication skills and my ability to prioritize and work multiple projects will allow me to thrive with NRC. Thank you for your consideration and I look forward to hearing from you soon.

Sincerely,

Sushil Agarwal

Attached: Resume