**AVINASH KUMAR 700, Health Sciences Drive, Mail box- 495**

**E-Mail:avinash.kumar@stonybrook.edu** Mobile: **+1 631-590-0596**

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| **Current Academic Status** |

* Graduate Student (MS in Computer Science), **Fall 2017** at State University of New York at Stony Brook.
* **Courses** – Artificial Intelligence, Asynchronous Systems, Computational Biology, Network Security
* Tentative Graduation Date – **Dec. 2018**

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| **Employment** |

**Sandvine Technologies, Bangalore, India Senior Software Engineer (Apr 2017 – Aug 2017)**

* Added Components to Sandvine’s SDE platform to enable Diameter based S9 interface to facilitate communication between two PCRF nodes.
* Added SNMP based alarm component for S9 session related issues.
* Improved the quality of existing software by resolving many critical defects.

**Cisco Systems, Bangalore, India Software Engineer (Mar 2013 – Apr2017)**

* Added Geographical Redundancy component at MME to enable 100% availability of the node even during complete chassis failure.
* Enhanced MME node to support MME-EMBMS functionalities by adding Sm and M3 interfaces.
* Enhanced CSFB (circuit switch fall back) component to seamlessly support Ultra Cards on 4G devices with SMS-only capability.
* Implemented a feature for heuristic paging of 4G devices which reduced redundant signalling in the network.
* Improved quality of the MME node by fixing many complex and critical bugs raised by QA Team and customers.

**Ingersoll Rand, Bangalore, India Software Engineer (Aug 2011 –Mar 2013)**

* Designed and developed BACnetscan app to capture data and alarms from remote BACnet Control unit and send it over XMPP to remote server and a web based configuration app for Connectivity Module.
* Designed and developed apps to capture, store, and process data packets on ZigBee Data Logger.
* Designed and developed Access Control App to control Access and Time and Attendance and a Point Manager App to manage scheduled switching of electrical devices connected through relay switches to GPIOs on SCCC (Small Commercial Converged Controller).
* Designed and developed a package of applications for Linux boxes to handle automatic start-up of all apps, critical process monitoring, process failure handling and failure email notifications.

**IBM India Pvt Ltd., Bangalore, India Software Engineer (Jun 2009 – Mar 2011)**

* Designed and developed enhancements on BMP (Business Management Platform) to validate the fields of Incident Tickets and to support IPV6 address field in Incident Tickets and update the database accordingly
* Managed multiple change-requests from customers to ensure timely and co-ordinated delivery of software updates.
* Monitored Server Farms’ health and provided first level support.

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| **Skillset** | | |
| Programming Languages | C, C++, Python, Bash |
| Operating Systems | Linux, StarOS, UNIX, Windows |
| Other Skills | 4G LTE EPC, MME, PCRF, Protocol Development, Diameter, Agile, Data Structures, Algorithms, Operating Systems, XMPP, BACnet, MODBUS, HTML, XML, CSS, SQL. |
| Development IDE and tools | Eclipse, vi, Make, gcc, gdb, valgrind, efence, git, bitkeeper, Wireshark, cscope |

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| **Academics** |

* PG Diploma in System Software Development, CDAC-ACTS, Bangalore, 74%, August 2011
* B.E. in Electronics and Communications, Anna University, Chennai, 82%, May 2008
* I.Sc., Science College, B.I.E.C, Patna, 70%, May 2002
* Matriculation, Patna Central School, C.B.S.E, 92 %, June 2000

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| **Other Technical Experience:** |

* Developed a basic loopback network driver on Linux as academic project at CDAC-ACTS.
* Developed a Microcontroller system to detect the alcohol consumption by driver and control the vehicle ignition and a Library Management System in C language with CLI during Bachelor of Engineering.

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| **Awards and Achievements** |

* Team Excellence Award for stable and high quality release of StarOS at Cisco.
* Star Award for developing ZigBee Datalogger and President Award for innovation at Ingersoll Rand.
* Merit-listed by CBSE for AISSE (All India Secondary School Examination)-2000.

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| **Personal Information** |

Date of Birth : 31th December 1985

Nationality / Passport Number : Indian / H0884799