Romit Dasgupta

Principal Software Engineer

Redmond, WA, USA dasgupta.romit@outlook.com

25 years of experience in software development, seeking Senior Staff and Principal level roles.

CORE COMPETENCIES

System Software, Cloud infrastructure, virtualization (GPU), embedded systems, kernel development. Experience spanning from low-level embedded systems, middleware to cloud applications.

С	C++	Python	JavaScript	Rust	Java	Linux Kernel	Virtualization (GPU)
gRP	C						

PROFESSIONAL EXPERIENCE

Apple

Principal/Staff Software Engineer (L5)

Sep 2021 - Present Seattle, WA

System and infrastructure software at Apple Cloud Services focused on virtualization (GPU). Enabled new hardware solutions for data center infrastructure.

- System software for custom data center hardware
- Prototyping and demonstrating solutions on novel hardware
- Technical presentation to senior management of prototypes leading up to program level approval and subsequent deployment
- Design and development of new infrastructure solutions for hardware and software



Google

Senior Software Engineer

- Led design of software interface for machine automation in data center operations
- Developed Android on Google Cloud VM instances with guest-host communication
- Built complete end-to-end BLE-based asset tracking device
- Solved critical issues from BLE bandwidth congestion
- Led microcontroller selection for next-gen products with multi-year battery life



Microsoft

Nov 2013 - Oct 2016

Principal Software Engineer

Redmond, WA

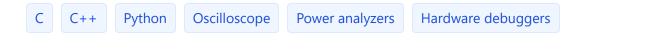
- Owned and delivered 'Deep Sleep' power management feature for Windows 10
- Explored new processor architectures for Microsoft Surface devices
- Added authentication between microservices for Azure Media Streaming

C C++	C#	Python
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Apple Software Engineer (L4)

Feb 2010 - Nov 2013 Cupertino, CA

- Led iOS kernel-level power management (iPhone, iPad, Apple TV)
- Key involvement in power management features design and implementation
- Collaborated with Silicon design engineers
- Worked across layers from ROM code to driver and instrumentation software



Texas Instruments

Lead Software Engineer

- Lead member of OMAP power management software team (team size 6)
- Contributor in USB 3.0 and USB 3.1 specification
- Contributed mainline Linux kernel patches
- Developed Host/Gadget OTG USB driver on PrOS

Linux Kernel PrOS С

Microsoft

Sep 2005 - Apr 2006 Hyderabad, India

- Ported kernel space embedded database engine from WinCE 5.0 to WinCE 6.0
- Delivered solution within 4 months

Windows CE C++

Software Developer

Sun Microsystems Member Technical Staff

Jan 2004 - Aug 2005 Bangalore, India

- OS-level system validation of SUN Sparc and x64 servers
- Verified DTLB cache for Sparc under Linux and Solaris
- Wrote kernel driver to enable ECC in DRAM controller

Cisco Systems Software Engineer

С

Oct 2000 - Dec 2001 Bangalore, India

- Control plane of Cisco Terabit routers
- Implemented installation and rollback features of software package management

QNX RPM C

Motorola

Software Engineer

- EDA Tools group of the VLSI division
- Ported layout tool from C to Java
- Added Genetic-Algorithm based Optimization module

C Java Clearcase

Sankhya Technologies

Software Engineer

- Java compiler and runtime evaluation team
- Wrote tests for www.nullstone.com
- Found and reported optimizer bug in Visual J++

Java	С	

Nov 1998 - Aug 1999 Bangalore, India

EDUCATION

National University of Singapore

Masters in Embedded Systems Full scholarship from NUS. Joint masters degree with TU/Eindhoven.

College of Engineering, Guindy

B.E. Computer Science & Engineering

2002 - 2003

1994 - 1998