

# Sumit Gupta

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## Professional Summary

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12 years of work experience, most recently in product management, product marketing, market research, and entrepreneurship. Broad and deep technical background in semiconductor design and software development. Have worked in the US, Belgium, and India.

## Work Experience

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### **NVIDIA**

*Nov 2007 – present*

#### *Sr. Product Manager*

- Product manager in the Tesla GPU high-performance computing group, responsible for the Tesla C870 board and the D870 Deskside product.
- Driving the Tesla products into the oil and gas, financial, molecular biology, Matlab, and other technical and scientific domains.

### **Tensilica Inc**

*Feb 2005 – Nov 2007*

#### *Product Marketing Manager*

- Managed the hardware deliverables, software applications, operating systems, and software tools for Tensilica's two main processor product lines. Was responsible for all inbound (product management) and outbound (product marketing) aspects and reported directly to the VP of Marketing
- Responsibilities included product management, strategy and roadmap, new product definition, launch plans, market and competitive analysis, collateral and sales tools creation, driving our global sales team, targeting assistance, webinars, and visiting existing and prospective customers and partners.
- Drove Tensilica's horizontal solution into several vertical segments such as wireless baseband, cellular phones, 3G/3.5G/4G mobile baseband, portable media players, GPS, Bluetooth, WiMax, and UWB.
- Previously managed Tensilica's multi-standard (H.264, MPEG-4, MPEG-2, VC-1) video product.

### **Tallwood Venture Capital**

*March 2004 – February 2005*

#### *Fellow/Entrepreneur-in-Residence*

- Incubated ideas and developed Tallwood's investment strategy for the FPGA and reconfigurable markets.
  - Evaluated market size and opportunities, customer requirements, barriers to entry, and table stakes for building a successful startup in this space.
- Evaluated a range of business plans such as UWB, WiMax, mobile TV, multi-core, video surveillance. Involved in all aspects of due diligence including market analysis, go-to-market strategy, technical innovation, valuation, exit strategy, etc.

### **University of California, San Diego & Irvine**

*July 2003 - February 2004*

#### *Post-Doctoral Researcher*

- Managed a group of graduate students working on three projects (a) reducing power for wireless mobile devices, (b) reconfigurable computing, (c) SystemC-based system-level modeling.

### **University of California, Irvine**

*September 1997 - June 2003*

#### *Graduate Research Associate (Ph.D. Candidate)*

*Advisor: Prof. Rajesh Gupta*

- Developed a *complete* behavioral C-to-RTL synthesis parallelizing compiler framework (in C++) called SPARK that takes an architectural specification and generates synthesizable RTL.
- Successfully marketed and commercialized my Ph.D. research:
  - Awarded \$50,000 seed grant in a business plan competition from UC, San Diego.
  - SPARK has been licensed and is sold commercially by Poseidon Design Systems.
  - Invited talks at UC Berkeley, NEC, Intel, etc and 1 book and over 20 publications.

**S3 India (now Intel), Bangalore**

March 1996 - August 1997

Member, Technical Staff

- Was among the first five employees of this startup designing a multimedia processor based on a RISC core with SIMD and DSP extensions. I was responsible for data path design, RTL coding, and synthesis.

**IBM, Bangalore**

May 1995 - March 1996

Software Engineer, Networking Group

- Worked on TCP/IP networking and ATM network simulation software development.

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**Education**

<i>Ph.D. in Computer Science</i>	University of California, Irvine, CA	2003
<i>B.Tech. in Electrical Engineering</i>	Indian Institute of Technology, Delhi, India	1995

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**Internships**

**Intel, Hillsboro (Strategic CAD Labs)**

June 2001- August 2001

- Developed heuristics to target Intel micro-architecture designs with the SPARK synthesis tool.

**IMEC, Leuven, Belgium**

June 1998 – August 1998

- Developed high-level compiler techniques to reduce computations in embedded code.

**Indian Institute of Science, Bangalore (Supercomputer lab)**

January 1996 – March 1997

- Developed algorithms to improve traffic flow through the interconnection network of a supercomputer.

**Central Scientific Instruments Organisation**

May 1994 – July 1994

- Designed a PCB for the head-up display of an avionics system.

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**Selected Awards and Honors**

- \$50,000 seed grant in a business plan competition from UCSD's *Von Liebig Center for Entrepreneurism* for commercialization of the SPARK software tool written for my Ph.D. work.
- Best Paper Award, International Conference on VLSI Design, 2003.
- Dissertation Fellowship, Information and Computer Science Department, UC Irvine, Spring, 2003.
- Best Student Paper Award, International Conference on VLSI Design, 1998.
- B. Tech. Thesis selected among Top 5 in the Electrical Engineering Department at IIT Delhi in 1995.
- Summer Undergraduate Research Award at IIT Delhi, 1994.

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**Professional Recognition**

- Poseidon Design Systems licensed the SPARK software tool for their design tool chain, June 2004.
- Received press coverage in EE Times for Ph.D. work on the SPARK synthesis framework, Dec. 2003.
- Program Committee, SIGDA Ph.D. Forum, Design Automation Conference, 2004.
- Guest Co-Editor for the Journal for Circuits, Systems and Computers, 2003.
- Invited talks at Xilinx, NEC, Intel, Semiconductor Research Corporation, UC Berkeley, UC Riverside.

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**Publication Summary**

1 Patent (pending), 1 Book, and over 30 industry and research articles and book chapters