Sumit Gupta

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Professional Summary

14 years of work experience, most recently in product management, product marketing, press briefings, 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

NVIDIA *Nov 2007 – present*

Sr. Product Manager

- Product manager in the Tesla GPU computing group (aka GPGPU), responsible for the Tesla high performance workstation products including the Tesla Personal Supercomputer.
- Responsible for product marketing and driving the Tesla products into the oil and gas, financial, molecular biology, bio-informatics, CFD, and other technical and scientific domains.
- Responsible for product launches, trade shows, and press briefings about Tesla and CUDA.

Tensilica Inc *Feb 2005 – Nov 2007*

Product Marketing Manager

- Managed the hardware deliverables, software applications, operating systems, and software tools for Tensilica's processor product lines. Was responsible for all inbound (product management) and outbound (product marketing) aspects.
- Responsibilities included product strategy and roadmap, product definition, launch plans, competitive analysis, 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* C-to-RTL behavioral synthesis, parallelizing compiler framework 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. 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.

Education

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

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 Cray machine.

Central Scientific Instruments Organisation *May 1994 —July 1994*
- Designed a PCB for the head-up display of an avionics system.

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.

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.

Publication Summary

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