Gurmeet Singh

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https://swiftgurmeet.github.io/resume/

Summary

I have over 25 years of leading edge technical experience both as a leader and an individual contributor with a record of highly effective and prolific execution. My strengths include good communication and analytical skills, breadth of knowledge and ingenuity.

I'm unable to travel outside the San Francisco Bay Area.

Experience

[16-17] CONSULTANT, ZGLUE INC.

- Implementation CAD flow using Tcl/Makefile Programming. Mixed-signal custom CAD support including SKILL language programming
- Setup extraction, static timing, lec, low power and physical verification flows using Tcl, Python and Csh scripts.

[15-16] STUDENT

- Data Science/Machine Learning/Programming Student - See courses below
- Kaggle Participant:
  - ➡ Ranked top 10% and 12% in two competitions
  - ➡ https://www.kaggle.com/gary347
- Swift programming:
  - ➡ http://swiftgurmeet.github.io/main/2017/03/02/Locu-ios-sample-app.html

[13-14] QUALCOMM TECHNOLOGIES, SENIOR STAFF ENGINEER

Floorplan, low power implementation using Tcl programming and verification of an audio codec product. Completed ahead of schedule expectations. (Qualcomm WCD9335).

[12-13] CADENCE DESIGN SYSTEMS, STAFF APPLICATION ENGINEER

Developed complete, automated rtl2gds flow using Tcl/Makefile programming in Cadence environment. Using the same, implemented an ARM A9 CPU core design @ 2.4GHz.

[11-12] SANDFORCE INC., PRINCIPAL ENGINEER

- Developed a 40 nm automated and optimized, tapeout ready, Cadence based implementation flow using Tcl/Perl/Makefile scripts for a correct by construction flow.
- Developed automated, tapeout ready, STA setup using Primetime-SI using Tcl scripts.
- Implemented many large blocks at tapeout quality using the above flow. Silicon success.
- Helped grow the size and capability of the design team and lead technical direction.

[08-11] CONTRACTOR @(QUALCOMM, SANDISK)

- Setup 40nm Cadence based, automated, tapeout ready, block level implementation flow using Tcl/Makefile programming.
- WiFi ASIC #1: Implementation of a large block using Magma. Silicon Success.
- WiFi ASIC #2: Full chip EM/IR signoff using Apache-Redhawk. Silicon Success.

[06-08] TERANETICS, PRINCIPAL ENGINEER

10GBASE-T PHY ASIC: Implement many large blocks, some using x-route. Automate implementation, static timing analysis, logical equivalence and physical verification flows using Perl and Tcl. Power estimation. Silicon Success.

[04-06] AIRGO NETWORKS, PHYSICAL DESIGN MANAGER

Multiple WiFi ASICs: Implement many blocks using Magma. Automate PTSI STA, formal, PV flows using Perl and Tcl programming. Project management. Silicon success.

[01-04] TRANSMETA, SMTS

1.2/1.8GHz Efficeon CPUs: Implement Hypertransport blocks; Register File design. Setup Memory array and noise methodologies. Silicon Success.

[99-01] SUN MICROSYSTEMS, MTS

- UltraSparc V CPU: CAM Register File, Custom logic circuit design
- 1.2GHz UltraSparc III CPU: Port a dozen dynamic adders up to 64-bits. Silicon success.

[97-99] INTEL CORPORATION, DESIGN ENGINEER

- 833MHz Xeon CPU: High speed dynamic circuit design for 2MB L2 cache. Silicon success.
- 600 MHz Pentium III CPU : GTL I/O circuit design. Silicon success.

[94-97] ST MICROELECTRONICS, DESIGN ENGINEER

Design of 32kx8, 128kx8 SRAMs. CAD setup. Design of CMOS RTC. Silicon success.

Education

I was the best student in my class for all seven years of college level education, including four at India’s best engineering institution.

[2015-2016]: ONLINE COURSERA COURSES

- Machine Learning
- Machine Learning With Big Data
- Practical Machine Learning
- R Programming
- Statistical Inference
- Reproducible Research

- Regression Models
- Functional Programming Principles in Scala
- Object Oriented Programming in Java
- Financial Markets
- Graph Analytics for Big Data
- Hadoop Platform and Application Framework
- The Data Scientist's Toolbox
- Getting and Cleaning Data
- Exploratory Data Analysis
- Developing Data Products
- Introduction to Big Data
- Introduction to Big Data Analytics
- HTML, CSS and Javascript for Web Developers

[12/2006] U.C. BERKELEY EVENING COURSE

Introduction to Digital Signal Processing Course, UC Berkeley, A Grade

[1989-93] M.ENGG., ELECTRICAL COMM, INDIAN INSTITUTE OF SCIENCE.

First class with distinction. Alumni medal, Best Student, 1990-93

[1986-89] B.SC., PHYSICS, DELHI UNIVERSITY.

First class with distinction, Gold medal, Best Student: 1987/88/89.

References

Available on request, including my recent supervisors.