Milnitas CA 95035

🛘 (+408)431 8434 | 🔼 nishchay.sinha@gmail.com | 🌴 www.nish-sinha.com | 📮 nishchay-nish-sinha | 🛅 nishchay-nish-sinha |

"Ain't the world be so much better if we only could fully understand the implications of second law of thermodynamics first"

## Summary\_

- Over ten years of experience designing and implementing distributed, multi processor and multicore systems to perform complex tasks in an efficient, fail-safe, high availability manner in varied and interesting application domains.
- Strong background in theoretical approaches to design and implementation of computer based systems in server based architectures and embedded systems. Interested in complexity theory, algorithms and data structures.
- Languages: Scala, Java, C++, C, C#, Emacs Lisp, Python, Shells in Unices.
- Systems: Writing real time OS systems, Linux OS, AWS ecosystem, Azure Systems.
- Tools: Latex, Excel, Matlab, Hadoop, Cassandra, Redis, Message brokers, Web frameworks, MySql, PostGresSql, Unit and Integration test methodologies, Asynchronous processing, PowerPC, Arm, Virtual machines.
- Frameworks: Web frameworks, .Net, Java EE, Scala Play, Akka microservices, Kafka messaging broker.

## **Education**

Stanford University CA, USA

M.S. IN ELECTRICAL AND COMPUTER ENGINEERING

**IIT** Kharagpur, India

B.S. IN ELECTRICAL AND ELECTRONICS ENGINEERING

## **Experience**

Xad Inc San Francisco, CA

STAFF SOFTWARE ENGINEER IN BACKEND

Jul. 2015 - Current

- Contributed immensely to migrate the real time auction server in newer scala framework
- Architect engineer in cluster controller subsystem that provided distributed programming model with strong exception guarantees.

Emc Inc San Francisco, CA

STAFF SOFTWARE ENGINEER IN BACKEND

Jan. 2015 - July. 2015

• Data Science and Analytics. A short term work in breaking ground for incorporating recommender system in storage usage analytics of content management systems. Created experimental models and studied the suitability of approaches.

Synopsys Inc San Francisco, CA

STAFF SOFTWARE ENGINEER IN COMPILER OPTIMIZATION

Dec. 2012 - Dec. 2014

- · Major contribution in feature enhancement and management of optimizer engine of synopsys integrated circuits compiler.
- $\bullet \ \ \text{Recognized for new optimization goal implementation in the electromagnetic emission constraint optimization problem.}$

Nuance Inc San Francisco, CA

SOFTWARE ENGINEER IN MULTIMEDIA SERVING SYSTEMS

Dec. 2010 - Dec. 2012

• Major contribution to bringing up new packet voice distributed processing system offered as SAS. Involved in conceptual design of backend architecture of server systems like load balancing, fail-safe architectures.

**Ditech Inc**San Francisco, CA

SOFTWARE ENGINEER IN MULTIMEDIA EMBEDDED SYSTEMS

Apr. 2006 - Aug. 2008

• Major contribution in design of packet multimedia processing and control system in multi array processor system with co located cores. The system needed to provide low latency and high bandwidth packet processing solutions to mobile phone networks.

Conexant Inc Redbanks, NJ

FIRMWARE ENGINEER IN MULTIMEDIA EMBEDDED SYSTEMS

Apr. 2004 - Apr. 2006

 Major contribution in implementing signal processing modules in DSL modem processors. Usage of acquisition and statistical techniques to decode data in DSL networks.

Ittiam systems Inc Bangalore, India

SOFTWARE ENGINEER IN MULTIMEDIA EMBEDDED SYSTEMS

Jul. 2001 - Mar. 2004

 Major contribution in design of real time scheduler and signal acquisition systems in PowerPC based architectures to implement telephony based modems.

FEBRUARY 22, 2017 NISH SINHA · RÉSUMÉ 1

## **Extracurricular**

- Interested in mathy stuff. Visit my webpage to see some Putnam/Imo problems and solutions which impressed me.
- Interested in Computer algorithms, their limits and approximate solutions. The field is bewildering in scope and sets me up for a lifetime in pleasure. Have created a modified Fibonacci heap and Max-flow algorithms, easier in analysis and ease of implementation. Please visit my githubs for more detailed information.
- Financial software analysis systems. Keep a tab on my githubs to see my latest implementation of Benjamin Grahams way of creating investment portfolios.
- O yeah, i will be happy to join you for your skateboarding and guitar jams.