Prashant **Jalan**

Web
prashantjalan.com
linkedin.com/in/jalanp

Cell & Skype
+1 650 229 3013
mrprashantjalan

Email
pjalan93@gmail.com

Address
912 Beach Park Blvd
Foster City, CA 94404

Interests
Artificial Intelligence
Machine Learning
Big Data
Parallel Computing

Courses
Data Structure Algorithms
Operating Systems
Compiler Design
Natural Language
Computer Vision
Computer Networks
Database Design
Game Theory
Social Media Analytics
Discrete Maths

Skills
Lang: C, Python, C++, Java
AI: Caffe, OpenCV, Weka, NLTK
Data: R, HDFS, Hadoop, Spark
Sys: Assembly, Lex, Verilog, Yacc
Parallel: OpenMP, CUDA C++
Dev: Android, Nginx, Django, Node.js, Redis, PL/SQL, SQL, MondoDB Docker, Celery

Experience

06/17 - Now **Software Engineer, Google** — Mountain View, California
Performance tracking of TPU hardware, analysis of Machine Learning models and developing performance analysis and debugging tools for internal and cloud TPU.

09/15 - 06/17 **Software Engineer, Oracle** — Redwood Shores, California
Design and development of algorithms, solutions and analysis schemes for the order processing backend platform at Oracle Public Cloud; along with handling live customers, production issues and data migration from time to time.

05/15 - 08/15 **Student Developer, Google** — Google Summer of Code
Conceptualized and implemented an open source 'Distributed Order Processing System' to distribute jobs among various worker nodes around the world.

05/15 - 08/15 **Visiting Research Scholar** — University of Heidelberg, Germany
Explored and computed multi-dimensional Finite Time Lyapunov Exponent ridges in space for particles with an initial mass and velocity on GPU.

05/14 - 08/14 **Research Intern, Directi** — Mumbai, India
Modelled and devised a real time 'Anomaly Detection Engine' to recognize and report anomalies or outliers for continuously generated advert production data.

05/13 - 08/13 **Robotics Engineering Intern, Systemantics** — Bangalore, India
Researched and developed an Android application from scratch to track a user's attention and regulate access to the locomotive controls of a robotic arm.

Publications

Identifying Hierarchical Structures in Sequences on GPU — IEEE ISPA '15
Invented Pequitur - a parallel algorithm to compress and infer hierarchical structure from a sequence. Achieved 3x speedup while having similar compression ratio on GPU (using CUDA).

TraffTrend-Real Time Traffic Updates & Trends using Social Media Analytics — ACM CoDS '15
Analyzed news, tweets & FB posts to show real time traffic updates & trends with 82.3% accuracy.

Syllables as Linguistic Units? — ICON '14
Established that unsupervised syllabic approach outperforms orthographic word model by identifying nouns (with semantic context) in a language with no prior knowledge or word boundary info.

Autonomous Rubik's Cube Solver Using Image Processing — IJERT '13
Engineered and fabricated an autonomous 3x3 Rubik's cube solver to detect, scan & solve a cube.

Education

07/11 - 05/15 **Bachelor's in Computer Science** — Indian Institute of Technology Kanpur, India
Minor in Industrial Management & Engineering
Graduated with Distinction. CGPA: 3.5/4.0
Awarded Academic Excellence award for exceptional academic performance.
A grade in four courses and two 'Best Course Project' awards.*
Secured 176 rank (top 0.03%) in IIT-JEE entrance examination.

Achievements

- Selected for the 5th South Asia Workshop '15 at the School of Computing, N.U.S., Singapore.
- Presented 'TraffTrend' software in the XRCI Open '15, organized by Xerox Research Labs.
- Invited for the workshop on Data & Text Analytics (DATA '14) organized by S.A.U., Delhi.
- Secured 2nd position among 400 teams in IHPC '14 (parallel programming competition).
- Winners among 10 teams all over India in National Technical Challenge, IBM I-CARE '13.
- First in Microsoft code.fun.do '13, a 24 hour hackathon organized at IIT Kanpur.