Sathyam Vellal

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Seeking internship opportunities for Summer 2017

EDUCATION

University of Southern California, Los Angeles, CA	August 2016 - Present

Master of Science, Computer Science
(High Performance Computing and Simulation)

PES Institute of Technology (autonomous), Bangalore, India	August 2010 - June 2014
(under **Visvesvaraya Technological University**, Belgaum, India)	GPA: 8.85 / 10

Bachelor of Engineering, Computer Science & Engineering

TECHNICAL SKILLS

Proficient in	C/C++, Java, Python, JavaScript, Shell, Linux
Familiar with	OpenMP, MPI, Boost C++, MySQL , Oracle, MongoDB, HTML/CSS, ES6, Node.js, PHP, Django, React-Native, Android, iOS, Git, SVN

PROFESSIONAL EXPERIENCE

PayPal Inc.	Bangalore, India
Software Engineer	June 2014 - July 2016

- Analyzed and worked towards tapering false positives in detection of fraudulent transactions, directly impacting annual revenue and providing better customer insights. *(C++, Java, Node.js)*
- Design, implementation and support for the Free Return Shipping web product. *(full-stack, Node.js, Backbone.js)*
- Design and implementation of a multi-faceted Mobile Wallet solution. *(Android, iOS / React-Native)*
- Also involved in realization of product design, enhancements and support to other products, technical support during events.

Intern	January 2014 - June 2014

- Contributed to the Next-Gen Payouts Experience by prototyping the MassPay product with improved user experience using modern web tools on the Node.js stack.

Boost C++ Libraries	(remotely) Bangalore, India
Contract Developer, Google Summer of Code	June 2013 - August 2013

- Modified core-functionality of the Boost.uBLAS library using aligned memory allocation and auto-vectorization. Further implemented more efficient algorithms to improve the overall performance of the library. *(C++, HPC)*

SELECT PROJECTS

Smart Personal Assistant   *Artificial Intelligence, Machine Learning, Android*   **(Aug 2014)**
Self-learning mobile assistant to detect and prioritize important SMS, track and log events from SMS and Email, and to also set alarms based on user's schedule/calendar.

0 A.D. Gameplay AI   *Artificial Intelligence, Game Development, JavaScript, C++*   **(Dec 2013)**
Contributed to the runtime execution and "thinking" abilities of the open source game's AI Bot to allow the computer gameplay make better and more strategic decisions. This added more realism to the opening gameplay.

PyOMP   *Python, OpenMP, Parallelization*   **(Dec 2013)**
Built a library to provide OpenMP-like constructs for Python to make for a simpler parallel programming interface using decorators. Also performed benchmark analysis and load and performance analysis on large data sets.

ASM Machine Simulator   *Compiler Design, Python, ASM, PyQt*   **(Dec 2012)**
For academic purposes, designed a simple assembly architecture and a machine simulator to run assembled programs written in the architecture. This made complex topics of ASM easier to understand and is still in-use today.

Survival of the Fittest   *Game Gevelopment, Symbian, Artificial Intelligence*   **(Aug 2011)**
Built a two-player and a four-player game based on the traditional Indian game of "Chowka Baara" with a robust computer gameplay. The game trended at the Top 10 new releases for the month.