# Darshan Washimkar

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## PROFESSIONAL PROFILE

I am a **Software engineer** holding a **master's degree** in computer science. With **3 years** of diverse **industry experience** in software development, **object oriented programming, algorithms and data structure**, I am looking for a software developer/engineer opportunity.

## TECHNICAL EXPERTISE

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|---|---|
| ➢ C, C++, JAVA, Python, JavaScript, HTML, C# | Programming languages |
| ➢ Node.js, jQuery , HTML5, JSON, PHP | Web development |
| ➢ MySQL, Oracle, MongoDB, SQL | Databases |
| ➢ Git, Mercurial | Versioning Tools |
| ➢ Amazon Web Services (AWS), Hadoop | Cloud services/tools |
| ➢ TCP,IPv4/6, BGP, Chord | Networking Protocols |
| ➢ Agile- Scrum, Waterfall | Methodologies |
| ➢ Eclipse, GDB, JIRA, Virtualbox | Other Tools |

## WORK EXPERIENCE

- **Software Engineer** — Nov 2016 – Present
  Nevelex Corporation — Los Angeles, CA
  - **Solved high priority defects** in DirecTV set-top box software which **directly impacts customers**
  - Handled crucial **JAVA and C++ applications** named druid, MOCA manager and webkit
  - Worked with **JIRA, eclipse, GDB, remote debugger**, **mercurial**, **ubuntu** to track and resolve defects
  - Wrote unit tests using **junit, mockito and gtest** frameworks for bug patches

- **Graduate Teaching Assistant** — Jan 2015 – Dec 2015
  Colorado State University — Fort Collins, CO
  - Assisted professors with classes such as "**computer security**", "**computer networks and the internet**", "**advanced computer networking**" and "**foundations in programming**"
  - Conducted **two recitations every week** for a batch of **30 students**

- **Developer** — Jan 2014 – Jan 2015
  Colorado State University — Fort Collins, CO
  - Delivered a translator module for **BGP Monitoring System** which **converts Multi-Threaded Routing Toolkit** (MRT) files to **XML format using C and C++**
  - **Developed visualization tools** using KML to simulate **DDoS attack** events like **NTP reflection attack**
  - Designed, developed and managed website for the BGPmon project

- **Programmer Analyst** — June 2011 – Sept 2013
  Cognizant Technology Solution — Pune, INDIA
  - Programmed websites and mobile applications using **JavaScript, jQuery, CSS, HTML 5, Node.js, boostrap, JAVA,** ASP.net for world's top pharmaceutical and financial firms
  - Employed **agile- scrum methodology** to develop various projects

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## EDUCATION

**Master of Science, Computer Science** — Aug 2016
Colorado State University, Fort Collins, CO, USA — GPA: 3.86/4.00

- Master thesis: "Error Correcting Optical Mapping Data": Developed the first non-proprietary method for correcting errors from DNA sequence bar code (known as Optical mapping data). Redundant information present in the data is used to rectify 83% of the errors.

**Bachelor of Technology, Information Technology** — May 2011
Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded, MH, India — GPA: 7.8/10

## AWARDS & CERTIFICATIONS

- Innovative gaming application award for the web app – "Honey Bee"
- "Low Cost Solutions Project Of The Year" for highest efficiency in developing websites and mobile apps
- Microsoft certification in programming HTML5 with JavaScript and CSS3 (Exam 70-480)

## ACADEMIC PROJECTS

- **Optimal Selection of Enzyme Triad Using MapReduce** — Oct 2014 – Dec 2014
  - Proposed a new method to find best restriction enzyme triad from ~11 million combinations using MapReduce
  - Implemented the algorithm in hadoop using python to distribute the task of finding shared sub strings in suffix tree
- **Forecast Use Of A City Bikeshare System** — Nov 2014 – Dec 2014
  - Implemented linear (LLS) and non-linear models(Neural Networks) to predict the demand for bike sharing system
  - Code implementation was in python and the results were submitted to kaggle for competition
  - Showed that non-linear model performs much better for this problem
- **Cloud based Source-aware key- value store** — Oct 2014 – Dec 2014
  - Distributed Hash Table (DHT) implemented from Chord paper using Java
  - Used cloud computing environments like Amazon Web Services (EC2,EBS) for development
- **Genome Assembler** — Aug 2014 – Dec 2014
  - Implemented a sparse de Bruijn graph for genome assembly from scratch in C++
  - Performed in depth theoretical investigations into various succinct data structures for de Bruijn graph optimization
- **A P2P File Sharing Network** — Feb 2014 – Mar 2014
  - Project involved development of peer to peer file sharing network that uses protocol resembling BitTorrent
  - Implementation of socket programming, fork, event loops was in C language
- **A File Sharing Protocol Over Named Data Networks (NDN)** — Mar 2014 – Apr 2014
  - Project was implemented using CCNx library from ccnx.org in C
  - Compared performance of the protocol in IP vs NDN configuration and found that NDN gave much better performance
- **Low Cost Supercomputer with Cluster Computing** — Aug 2010 - Apr 2011
  - Built a simple-to-manage and easy to deploy HPC cluster from outdated PCs of college laboratory aiming to run compute intensive software applications in an academic setting
  - Used HPLinpack to evaluate the performance