# Avanti Patil

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**Portfolio:** https://patilav.github.io | **Github**: https://github.com/patilav | **LinkedIn**: https://www.linkedin.com/in/avantipatil

OBJECTIVE: I am looking for **full-time software engineer** job opportunities **starting from Jan 2017**.

## EDUCATION:

**Northeastern University (NEU),** Boston, MA GPA: 3.79/4.0 Sept 2014-Dec 2016
Master of Science in Computer Science
Related courses: Algorithms, Advanced software development, Web development, Human Computer Interaction, Computer Systems, Distributed systems, Database Management System

**University of Mumbai, Mumbai, India** June 2011
Bachelor of Computer Engineering (Graduated w/ Distinction - Received J. R. D. TATA Scholarship)

## TECHNICAL SKILLS:

**Languages**: Java, C, C++, Python, Linux & Unix shell Scripting, C#, SQL, PL/SQL, HTML, JavaScript, Bootstrap
**Frameworks**: AngularJS, Node.js, Flask, Spring MVC, Struts 2, ASP.Net, Message Passing Interface, Android
**Databases**: Oracle 9i, Oracle 10g, MS SQL Server, MS-Access, IBM DB 2, MongoDB, Neo4j graph database
**Tools & Version control:** Git, Subversion, Jira, Confluence, Bitbucket, TeamCity, Asana, Trello, Slack

## WORK EXPERIENCE:

**Northeastern University** Jan - May 2015
*Teaching Assistant - Web Development*
- Graded and redesigned the coursework with Professor and Hosted TA sessions for guiding students on debugging code and solving problems on Mongo dB, Angular, Node.js.

**VMware.inc, Cambridge, MA, USA** May - Dec 2015
*Site Recovery Management Intern & VMware Intern Prodigy for Northeastern University*
- Designed an Availability Zone API that allows multiple VMware DR solutions to operate in a cooperative fashion.
- Developed a python script to scale test SSL authentication token service for an internal project with maintained wiki.
- Presented Availability zones project and won Cambridge poster session for the same and attended VMWorld conf.

**NSE InfoTech Services LTD, Mumbai, India** Jul 2011 - Jun 2014
*Associate System Analyst*
- Developed 4 major time critical projects using Java, RMI and Oracle 10g in 2 years and awarded 2 recognitions
- Created a frontend to show user portfolios by fetching data from in-memory hash tables in shared memory.
- Worked on benchmarking data flow via TCI/IP socket connection and optimized risk mgmt. system to get increased computing efficiency (50%) & higher trade processing rate (30%) using MPICH & C.

## PROJECTS:

**FUSE file system** (C, Valgrind, Shell Scripts) NEU, MA Dec'16
- Created a File system in User Space for handling general purpose file commands in C while handling direct and indirect data blocks on user generated disk images. Tested fuse code with bash scripts with 90% test coverage.

**Social Networking for projectfeed1010** (Python, OAUTH, Flask, Unittest, Neo4j) NEU, MA Jan-May'16
- Developed an efficient social networking site for ISB's acquaponics system users with a self-organizing team of 6 people.
- Lead project in given timeline while interacting with 4 teams in 2 time zones & released to 100 users for beta testing.
- Created and tested an API for fetching data from neo4j while considering scalability with growth of user base (~100k).
- Generated unit test suites as well as integration tests and code coverage of 90%+ in each agile sprint.

**Availability Zones** (C++, VMODL, Java, Python) VMware.inc, MA May-Dec'15
- Availability Zone which describes both the topology of storage replication (vSphere replication and Array-based replication) as well as the sites (be vCenter Server or a vDC in vCloud Air) that are enabled with DR capabilities
- Availability Zone API allowed same workloads to be mobilized (recovered) to different sites by different DR products such as SRM and/or DR2C which was thoroughly tested with Jenkins and code was reviewed by SRM team
- Worked with a mentor and a world class disaster recovery solution team to build a prototype for creating Availability Zone API in Site Recovery Management 6.0 codebase using C++ and Java frontend and collected results

**Integrated Voluntary closeout and Risk management system** (C, MPI, SQL, Java) NSE Sep'13 - Jun'14
- Developed an integrated risk management system for order and trade computation using parallel processing in C, MPICH and LBM29 west multicast protocol on multicore processors in Linux environment.
- Designed highly effective architecture for fair utilization of the CPU and I/O with shared memory and priority queue.

## INTERESTS AND ACTIVITIES:

- **Founder** & President of **NU Grad Women Coders and HackNEU Hackathon** @NEU