

Avanti Patil

+1-(617)-800-3400
patilavanti2k16@gmail.com
Github: <https://github.com/patilav>

97 St Stephen Street, Apt 8, Boston, MA, 02115
Personal portfolio: <https://patilav.github.io>
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:

Massachusetts Bay Transportation Authority (MBTA)	Jul - Sep 2016
<i>Business Analyst Intern</i>	
<ul style="list-style-type: none">Documented current process flow in MS visio for Payment, Benefits and Training modules.Created PeopleSoft security administration roles for PeopleSoft 9.2 upgrade.Worked on fit gap analysis of project as well as maintained best practices in agile scrum using tools like Slack, Asana	
Northeastern University	Jan - May 2015
<i>Teaching Assistant - Web Development</i>	
<ul style="list-style-type: none">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 2016
<i>Site Recovery Management Intern</i>	
<ul style="list-style-type: none">Designed an Availability Zone API that allows multiple VMware DR solutions to operate in a cooperative fashion.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.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.Worked as a VMware Intern Prodigy Program for Northeastern University and provided useful insights to University Relations Team about campus and students expectations from company.	
NSE InfoTech Services LTD, Mumbai, India	Jul 2011 - Jun 2014
<i>Associate System Analyst</i>	
<ul style="list-style-type: none">Developed 4 major time critical projects within the first 2 years and awarded 2 recognitionsDesigned and developed IRF/CD/FO risk mgmt. system with cutting edge technologies such as High performance computing in C using Message Passing Interface & Multithreading while working with cross-functional team of sizes 12.Implemented risk management system frontend using Java, RMI and Oracle 10g to show user portfolio while efficiently fetching data from in-memory hash tables maintained in shared memory.Worked on benchmarking data flow via TC/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 for testing)

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.

Social Networking for projectfeed1010 (Python, OAuth, Flask, unittest, Neo4j)

NEU, MA

Jan-May'16

- Developed an efficient social networking site for ISB's aquaponics 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 test and code coverage of 90%+ in each agile sprint.

MBTA Group Orders automation (Asp.net, C#, SQL)

NEU, MA

Jan-May'16

- Lead team of 4 to work with our client MBTA on a real time project with stringent deadline.
- Performed requirement gathering and feasibility study which was very crucial and well executed.
- Developed product using agile methodology with weekly code reviews and wrote unit and scale tests for the code.
- Received Best Client Relationship award for project which successfully went live in June 2016 for entire MBTA user base.

Availability Zones(C++, VMODL, Java, Python)

VMware.inc, MA

May-May'16

- 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.

Union Capitol Boston web app (Material design, Angular, MongoDB, Angular UI Routing)

NEU, MA

Sep-Dec'15

- Conducted interviews and generated user personas as well as brainstormed ideas for creating best user centric design.
- Designed and developed a single page interface which is both clean and easy to use with new features like Carpool and Help a Friend in a scalable platform for 500+ user base of Union Capitol Boston-a non profit organization.

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.

PERSONAL PROJECTS:

TampX Check (Android, Java, Affectiva API)

Lady Problems Hackathon, MA

Nov'16

- Designed and developed a functional Android app in 15 hrs, to suggest the tampon absorbency level by analyzing results of the Tampax algo and user's emotions recorded by Affectiva's emotion recognition API.

Cornerwise (Docker, Python 3.5, PostGIS, Backbone.js, jQuery, Leaflet) Code for Boston, MA, USA

May-Sep 2015

- Developed web based UI to update people about proposed zoning changes and evolution of the zone.

INTERESTS AND ACTIVITIES:

- Founder & President of NU Grad Women Coders and HackNEU Hackathon @Northeastern University.
 - Boston Augmented Reality/Mixed Reality meetup Volunteer.
-