

# Swati Lodha

swatilodha27@gmail.com  
swatil@vt.edu | +1(540)-824-8599

## EDUCATION

### MASTERS' IN CS

VIRGINIA TECH  
August 2021 - Present  
GPA: 3.85/4

### B.TECH (CSE)

THE LNM INSTITUTE OF  
INFORMATION TECHNOLOGY, JAIPUR  
July 2014 — May 2018  
CGPA: 7.74/10

### ALL INDIA SENIOR SECONDARY CENTRAL EXAMINATION

2014  
Percentage: 89.5

### ALL INDIA SECONDARY CENTRAL EXAMINATION

2012  
CGPA: 10/10

## LINKS

Github:// <https://github.com/swatilodha>

LinkedIn://  
<https://www.linkedin.com/in/swati-lodha>

Blog URL://  
<https://swatilodha.wordpress.com>

## COURSEWORK

Data Structure and Algorithms  
Design and Analysis of Algorithms  
Theory of Algorithms  
Object Oriented Programming  
Database Management System  
Software Engineering  
Operating Systems  
Compiler Optimizations  
Python Specialization (University of Michigan)

## SKILLS

Platform: GNU/Linux  
Software: Simulink, VTune  
Programming: C++/C, MATLAB, Java, Python  
Database: MySQL, SQLite  
Version Control: Git, Perforce  
Debugging: GDB, Emacs  
IDE: IntelliJ, Eclipse

## EXPERIENCE

### LINKEDIN | SOFTWARE ENGINEERING INTERN

May 2022 - Aug 2022

### MATHWORKS | SENIOR ASSOCIATE SOFTWARE ENGINEER | SOFTWARE ENGINEER

June 2018 - July 2021

- Improved multiple aspects of Simulink architecture to better interface with Variants technology. This enabled the delivery of scalable, reusable and performant variant solutions.
- Modernized C style code-base to use newer C++ semantics, enhancing the feature delivery rate and reducing the market bug count of the team.
- Worked with cross functional teams to introduce the notion of 'Startup Time' selection of Variant choices- a top request from multiple key customers.
- Member of interview team for campus placements

### MATHWORKS | SOFTWARE ENGINEERING INTERN

January 2018 - May 2018

- Designed and studied the feasibility of new semantics in Variants, designed blocks to implement these and presented the design to key stakeholders.
- Redesigned the Simulink Variants test bed for better test discoverability and test coverage.

### KDE COMMUNITY | GOOGLE SUMMER OF CODE'17

May 2017 - August 2017

- Worked on DigiKam - an advanced open source photo management software
- Isolated tables and schema relevant to similarity fingerprints.
- Created new schema and new DB access interface for similarity feature.
- Implemented code for MySQL and SQLite to support new similarity DB

### KDE COMMUNITY | GOOGLE SUMMER OF CODE'16

April 2016 - Aug 2016

- Worked on DigiKam- Reviewed code base and database implementation including XML files to improve MySQL support
- Fixed long pending bugs and identified dysfunctions/missing features.
- Improved test coverage with additional unit testing

## PROJECTS

- Thesis: Systematic Literature Review of Agile methods in teaching Software Engineering Courses
- Social Networking Website [Skills: Java, Servlets/JSP, HTML5/CSS]
- Android App [Skills: Java, Firebase, Agile/Scrum]

## ACHIEVEMENTS

- Accepted speaker at Open Source Summit 2019, San Diego, CA
- Awarded scholarship by The Linux Foundation to attend Open Source Automotive Linux Summit 2018 in Tokyo, Japan.
- BoF speaker at Ohio Linux Fest 2017.
- Awarded the Student Scholarship to attend Grace Hopper Conference, 2016.
- Won Oracle 2016 GHCI Hackathon.