

### Prashant Singh Operations Research National Institute of Technology, Durgapur

M.Tech. psonlinux@gmail.com 7676798841

Examination	University	Institute	Year	CGPA / %
M.Tech. in Operations Research	NIT, Durgapur	NIT, Durgapur	2018	7.75
B.Tech. in Biotechnology	NIT, Durgapur	NIT, Durgapur	2011	7.0

## Employment(s)

- As Teaching Assistant taught following courses
  - Numerical Analysis Lab in C language, May 2018.
  - Operations Research Lab in Matlab, Dec 2017.
- System Engineer in TCS (July 2011 July 2013)
  - Remotely managed integration servers installed on Redhat systems using linux commands and script.
  - Created web services to migrate data from legacy system IBM DB2 database to latest oracle database using Oracle Middleware Technology.

## Course Projects

- M.Tech project: Recognition of printed Odia(A language spoken in India) character using neural network , June 2018.
  - recognized 62 basic Odia characters (10 numerical, 12 vowels, 40 consonants) in a given image and convert them to computer editable text using deep neural network. Got an accuracy of 97.75
  - Input layers = 784, hidden layers = 300, output layers = 62
  - Technology used: Python, OpenCV
- Created web based game 2048: https://gitlab.com/psonlinux/2048-game-web
- Created following command line games
  - 2048 in C++, https://gitlab.com/psonlinux/2048
  - "Game of Fifteen" in C, https://gitlab.com/psonlinux/game-of-fifteen
- Created GUI game
  - Breakout in C, https://gitlab.com/psonlinux/breakout

# Languages and Technologies

- C++, C, Python, Java, OpenCV, LATEX, HTML, CSS, Bootstrap, jQuery, JavaScript, MySQL, Oracle 11g, SQL, Matlab, Shell Scripting
- Vim, Git, GDB, Eclipse IDE, Visual Studio
- Linux, Ubuntu 18.04 LTS

## Courses Taken

- Graduate courses:
  - Programming Language and Data Structure, Automata and Algorithms, Discrete Mathematics, Operations research, Probability and Statistics, Optimization Techniques, Numerical Methods, Advanced optimization techniques
  - Advanced Statistical Analysis, Advanced operations research

- Undergraduate courses:
  - Computer Networks, Operating Systems, Data Structures, Communication Network, Databse Management Systems.

### **Online Courses**

- Deep Learning Specialization, Coursera, Jan 2019
  - Neural Networks and Deep Learning, Grade Achieved: 98.6%
  - Structuring Machine Learning Projects, Grade Achieved: 96.7%
  - Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization, Grade Achieved: 100.0%
  - Convolutional Neural Networks, Grade Achieved: 98.9%
- CS50's Introduction to Computer Science, Edx, July 2019
- Introduction to Computational Thinking and Data Science, Grade achieved 97%, EdX, MIT, Aug, 2018, certificate link https://courses.edx.org/certificates/dedde4a63ca24a20895fa4332c741df4
- Introduction to Computer Science and Programming Using Python, Grade achieved 99%, EdX, MIT, Sept 2017 certificate link https://courses.edx.org/certificates/81b7b36c7f7b484ebb5880094380b472
- Machine Learning Stanford University, Coursera, November 2017, Grade Achieved: 97.6%
- Algorithms: Design and Analysis, Part 1, Coursera, Grade Achieved: 84.5%, September 2015
- Front-End JavaScript Frameworks: AngularJS, Coursera, July 2016
- Introduction to jQuery, Grade achieved 98%, Microsoft DEV208X, EdX
- Introduction to Computing with Java, Grade achieved 95%, EdX, Sept, 2014

### Achievements

- $\bullet$  All India Rank 1593 among 1,08,495 in GATE-2016 in Computer Science .
- Solved 400+ Leetcode problems (https://leetcode.com/psonlinux/)
- Cummins Inc.'s client provided certificate of appreciation.