Prashant Singh
Operations Research
National Institute of Technology, Durgapur

M.Tech.
prashantexploring@gmail.com
7676798841
LinkedIn

Education

- National Institute of Technology, Durgapur
  - M.Tech. in Operations Research, CGPA 7.75, (2016 - 2018)
  - Graduate Courses : Programming Language and Data Structure, Automata and Algorithms, Discrete Mathematics, Operations research, Probability and Statistics, Optimization Techniques, Numerical Methods
- National Institute of Technology, Durgapur
  - B.Tech. in Biotechnology with open electives from Computer Science, CGPA 7.0, (2007 - 2011)
  - Undergraduate Courses : Data Structures, Computer Networks, Operating Systems, Communication Network, Database Management Systems

Employment(s)

- Software Developer, VHR Solutions (Feb 2020 - present)
  - Working in payments team of Infosys's Finacle product . It provides universal banking solution . Technology used is C/C++ , Shell Scripting, Postgres, Oracle Database, Unix, Git, Docker .
- As a Teaching Assistant, taught following courses during M.Tech. at NIT Durgapur (July 2017 - May 2018)
  - Numerical Analysis Lab using C programming, May 2018 .
  - Operations Research Lab using Matlab, Dec 2017 .
- System Engineer, TCS(Tata Consultancy Services, Chennai) (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 . The data of DB2 was exposed in XML and the web services were consuming these data and inserting it into Oracle database .

Projects

- Created a web application for handling pizza restaurant's online orders , using Django web framework : https://github.com/eelectron/pizza , HarvardX: CS50's Web Programming with Python and JavaScript, Jan 2020

  Features supported :
  - User can register and login
  - Items can be added to cart . User can see cart items even after logout or from different machine .
  - Supports multiple item like pizza with topping, salad, pasta and can be extended in future
  - User gets order confirmation email
- Created a chatting application named Flack , similar to Slack , using python, flask and socketIO . User can register, create new channel , delete their post, check others post in real time using socketIO . : https://github.com/eelectron/flack , HarvardX: CS50's Web Programming with Python and JavaScript, Jan 2020
- Created a book review website, lookthebook . Technology used are Html, Javascript, Python, Flask, Postgresql database : https://github.com/eelectron/BookReview , HarvardX: CS50's Web Programming with Python and JavaScript, Dec 2019

  Features supported :
  - User can register, login and logout
  - Instant book search by entering book's title, author, isbn or published year using ajax
  - Check average rating of book given by Goodreads website
  - Can comment on book
- 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

Additional 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, HarvardX, July 2019
- Computational Thinking using Python, MITx, Aug, 2018
- Machine Learning Stanford University, Coursera, November 2017, Grade Achieved: 97.6%
- Algorithms: Design and Analysis, Part 1, Coursera, Grade Achieved: 84.5%, September 2015

Skills and Technologies

- Web Framework : Django, Flask, JavaEE
- Algorithms , Data Structure, Object Oriented Design, Responsive Web Design
- Programming languages: C++, Python, Java , C , Matlab
- Frontend : Ajax, Javascript, Html, CSS
- Backend : Postgres, sqlite, oracle
- Tools and IDE : Vim, Git, GDB, Eclipse IDE, Visual Studio, OpenCV, LaTeX
- Operating system : Ubuntu, Mac, Windows

Achievements

- Solved 450+ Leetcode problems (https://leetcode.com/psonlinux/)
- All India Rank 1593 among 1,08,495 in GATE-2016 in Computer Science .
- Cummins Inc.'s client provided certificate of appreciation.