

# Girish Kumar

<https://girishk.net>

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## EDUCATION

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- **Indian Institute of Technology Ropar** Punjab, India  
*Bachelor of Engineering in Computer Science; CGPA: 7.06* Aug. 2016 – Present
- **Rajasthan Board of Secondary Education** Kota, Rajasthan  
*Maths & Science; 85.8%* 2016

## INTERNSHIP

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- **Zomato** Gurgaon, India  
*SRE Intern* May – July 2019
  - Maintained and improved SMS Service, designed template based system and added stats using prometheus
  - Revamped the entire codebase for easier extension and scaling of the service
  - Designed a dashboard for admin uses using React, PHP and GO
  - Learned software engineering patterns and some cool tech stuff

## PROJECTS

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- **COMPETITIVE PROGRAMMING PLATFORM** Django, Docker, Redis, Postgres
  - CodeArea is a competitive programming platform
  - Designed code editor and judge for submission using python and Docker
  - Added priority queue using Celery and Redis
- **LOCAL AND ONLINE PRICE COMPARISON** Django, Postgres
  - Created a web app on which sellers can post there products, maintain multiple shops
  - Users can compare a particular product's price from different sellers and online store e.g. Amazon
- **MULTIPROCESSOR SIMULATOR** C++
  - Created a multiprocessor simulator for a 16-bit simple RISC isa in C++ by executing operations in circular fashion
  - Added instruction to simple-RISC for parallelsim, eg. WFE(wait for event), SEV(send event)
- **FLAPPY BIRD AI** Neural Network, SVM, pygame
  - Created flappy bird game using pygame
  - Trained gaussian and linear svm for flappy bird game
  - Implemented neural network with genetic algorithm for flappy bird
- **FPS - AI** Deep Reinforcement Learning
  - Designed and Trained, deep neural network with A2C algorithm for various scenarios of vizdoom environment
  - Compared different approaches and algorithms for different scenarios
  - Learned deep reinforcement learning

## ABOUT ME

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- **Tech Skills**
  - **Programming:** GO, Python, C/C++, React
  - **Other:** Redis, Docker, Sql, git, Linux, VIM
- **Awards & Honors**
  - Won hackathon at Advitiya IIT Ropar Tech Fest
  - Got selected for KVPY scholarship

## MOOCs

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- **Coursera:** Algorithmic Toolbox
- **Coursera:** Neural Networks and Deep Learning, Improving Deep Neural Networks