

Vikas Yadav

<https://in.linkedin.com/in/vikas-yadav-87343b82>

<https://github.com/vy007vikas>

vikasyadav.iitr@gmail.com | +91-9897771868

EDUCATION

IIT ROORKEE

BTECH IN COMPUTER SCIENCE

Expected May 2017

Cum. GPA: 8.61 / 10

Major GPA: 8.73 / 10

COURSEWORK

UNDERGRADUATE

Design and Analysis of Algorithms

Discrete Structures

Machine Learning

Artificial Intelligence

Data Mining

Compiler Design

Operating Systems

Advanced Operating Systems

Computational Geometry

Formal Methods and Soft. Verification

Database Management

Computer Networks

Theory of Computation

HONOURS

Advanced Graph Theory

ONLINE

CS231n - Convolutional Neural Networks
for Visual Recognition, Stanford

SKILLS

PROGRAMMING

C++ • Python • JavaScript

C# • Git • L^AT_EX

MACHINE LEARNING

TensorFlow • Thenao • PyTorch

SOFTWARE PACKAGES

Github • Matlab • MySQL

Wolfram Mathematica

EXPERIENCE

MICROSOFT IDC | SOFTWARE DEVELOPER

12th June 2017 – Current | Azure Site Recovery

- Introduced weekly events analysis for faster bug fixing for HRL Processor.
- Optimized download speed of HRL log files by a speedup of 43%, thereby reducing total replication time.
- Designed and implemented Circuit Breaker framework for HRL Processor.
- Improved overall time in A2A replication scenarios by analyzing and improving timeout and retry strategies and buffer windows.

MICROSOFT IDC | SOFTWARE ENGINEERING INTERN

9th May 2016 – 9th July 2016 | Backup and Data Recovery

- Designed a framework to allow Azure IaaS VMs to take app-consistent backups for various workloads running in background.
- The framework also took advantage of native app API's to put the app in a consistent state and thereby allowing the VM Snapshot to be app consistent.
- The solution was been integrated with Azure Linux IaaS VMs and received wide appreciation among Azure Linux community.

PROJECTS

DEEP DETERMINISTIC POLICY GRADIENT (DDPG) | AUG 2017 – SEPT 2017 | REINFORCEMENT LEARNING RESEARCH

Implemented Google DeepMind's research paper on DDPG in PyTorch (Python) and obtained quality results on various AI challenges on OpenAI gym. This project got featured in **Github Daily Trending repositories**.

CAPTION BASED REGION EXTRACTION | JULY 2016 – APRIL 2017 DR. PARTHA PRATIM ROY | DEEP LEARNING RESEARCH

Worked with Dr. Partha Pratim Roy and designed a RPN + CNN + LSTM network along with skip-thought vectors to localize the region in the input image best suiting to the input description.

2048 AI | JAN 2015–FEB 2015

Developed a terminal version of the famous 2048 game using C++ and an AI using minimax algorithm along with alpha-beta pruning to solve it.

AWARDS

- Secured a national rank of **2/1000** in the online round and **15/100** in the final round of **ACM ICPC CHENNAI ASIA 2015**.
- Secured a national rank of **4/1000** in the online round and **40/400** in the final round of **ACM ICPC AMRITAPURI ASIA 2015**.
- Got selected for and attended ICPC Summer Training Camp (2015), Bangalore.

EXTRA CURRICULAR

2014–2017	Coordinator	Programming and Algorithms Group, IIT Roorkee
2014–Present	Programmer	Online Sport Competitive programming
2013–2014	Developer	Software Development Section(SDS), IIT Roorkee