



Sunil Kumar

Introduction

I am a Master of Computer Science Student at University of Victoria. I have 3 years of software developer experience with software product companies including Drishti-Soft Solutions aka Ameyo and Zillious Solutions in India. Seeking co-op opportunities where I can fully utilize my skills for the success of the organization and learn new skills for the cutting edge of technologies in the industry.

Education

M.Sc. in Computer Science [Jan 2019 – Expected Jan 2021]

University of Victoria – 7.33 / 9.0 GPA

Projects: Training an DQN agent for Coinrun ([GitHub](#)) and Matchmaking for online multiplayer games ([GitHub](#)).

B. Tech. in Information Technology [August 2010 - May 2014]

NIT Durgapur - 8.10 / 10.0 CGPA

Projects: Collage Study Point Website ([GitHub](#)), Digital Clock on Multisim and Exploration bot.

12th & 10th CBSE [March 2007 & March 2010]

K V Bengdubi - 85.8 % & 79.8 %

Projects: Book Shop Management, Tic Tac Toe bot

Technical Skills

- **Languages** : Java, JavaScript, Python, Golang, PostgreSQL, MySQL, C, C++, CSS, HTML, PHP, Shell, LATEX, .
- **Tools** : Docker, Kubernetes, Google Cloud Platform, Word, Excel, PowerPoint, Adobe Photoshop, gRPC, Swagger, REST APIs, Git, GWT, JDBC, Hibernate, Eclipse, PyCharm, OOPs, Data Structures, Deep Learning.
- **Operating Systems** : Linux, Windows

Experience

JULY 2018 – DECEMBER 2018

Technical Associate / Zillious Solutions, New Delhi, India.

- Implemented a solution for their long-standing issue (java enum limit) requiring minimum changes in the application.
- Design and developed support for customizable voucher and integrated multiple payment gateways.
- Integrated pre-developed machine learning model into the application for finding duplicate hotels.

NOVEMBER 2016 – JANUARY 2018

eSports Player / Ragequit eSports Solutions, New Delhi, India.

- From Dec 2016 to June 2017 was part of DOTA 2 eSports team Sponsored by Ragequit eSports Solutions, New Delhi.
- Runner up in COBX National DOTA 2 tournament (Buriza Team, Hyderabad, May 2017).
- Won Playtonia DOTA 2 tournament (Nefarious Team, Delhi, Aug 2017).
- Won Indian LAN Gaming Cup DOTA 2 tournament (Nefarious Team, Delhi, Oct 2017).
- Runner up in Aorus Land DOTA 2 National tournament (Nefarious Team, Bangalore, Jan 2018).

JUNE 2014 – SEPTEMBER 2016

Software Developer / Drishti-Soft Solutions, Gurugram, India.

- Majorly worked on Ameyo Report (GWT based front-end and Jasper based backend) this includes UI Renew, transformer (denormalize data for reporting) modeling to ease generation of new transformers and backend enhancements. Shell Scripts for migration and debugging.
- Created a Report Scheduler (Quartz library) with support for Centralized Reporting (Ameyo ART) and Graphical Reports.
- I increased performance for a large scale customer's database (PostgreSQL) by 80-90% using table partition, Multicolumn Indexes, PostgreSQL Function and triggers.
- I increased the company's server-side stats manager's performance using cache (SoftHashMap) for reflective calls by 60%.
- I developed a Report Designer: Front-end GWT UI which has generated data based on Model instances (.xmi) and output from the UI is a Model (EMF) object (.drxml) which converted by backend into jasper based object (.jrxml).
- Resolved numerous L4 Critical Cases which were spread across multiple plugins of Ameyo Server and Client Application.
- I created Magic Numbers: Predict Hardware requirements (CPU, RAM and HDD) based on Customer requirements for reporting server.
- Automate HDFC collection process. Fresh UI, Integrating HCP for storage, SSO Authenticating server & Centralized Exclusion.

- Explorations: GWT bootstrap, Database Partition, HCP Integration, Bonita BPM.
- Awarded with Excellence Award 2016 and won /tmp 2014, also participated /tmp 2015 and HUNKAAR 2016. (10 days 24x7 coding event).
- Part of Hiring team for the 2016 and 2017 batches. (Question preparation, Interview Rounds and training after hiring).

JUNE 2013 – AUGUST 2013

Software Developer Intern / Morphing Machines, Bangalore

- I designed and developed the front-end interface for a project called 'Development Of A Flexible Framework for A Network On Chip'. ([GitHub](#))
- UI starts with a 4 page Wizard then shows [EMF](#) based resulted graph using [Graphiti](#) and finally produce a XML for the python written scripts which run and produce [VHDL](#) based back-end [NOC](#).

Activities

After College:

- TOEFL exam scored 95/120 (Jan 2018).
- Completed Spoken English Upper Intermediate course with Very Good result from British Council, New Delhi.

During College:

- Attended Workshops:
 - Ethical hacking & Information security by Kyron Digital Securities 2010. (In 1st year).
 - Photoshop workshop in 2011.
 - Android workshop in 2012.
- Participated in contests:
 - 1st position in behind the Scene in MuKti '13. (coding event).
 - 1st position in InCanity in MuKti '13. (coding event).
 - 2nd Position in Simplex in ANK '12. (coding event).
 - Participated in National Robotic Contest 2013 Pune-India.

During School:

- 82% Marks secured in Junior NTSC Mathematics. (Jan 2005)
- MERIT in First Nationwide Biotechnology Olympiad with All India/state/school Ranks: 696/11/2 (Aug 2006)
- Distinction in International Assessments for Indian Schools Science with Top 4%.
- Distinction in International Assessments for Indian Schools Math with Top 5%.
- Participated in NSE in Astronomy 2008-2009 (Senior Level) Among top 10%.
- Ranked among the 2.4% of all student appeared in AIEEE-2010.

Extracurricular activities:

- Selected for 35th, 36th, 37th K.V. National Sports meet in chess after getting 3rd, 1st and 2nd position in Regional Sports meet in 2007, 2006 and 2005 respectively
- Participated 3 times in 8-10 Days High Altitude Trekking Programme (Manali, Shimla) and coved 110 K.M. and gained 12000 feet height.

Hobbies

- **Video Games** (2nd in COBX and Aorus Land 2017 National DOTA 2 tournament, Won Playtonia & Indian LAN Gaming Cup)
- **Karate** (Green belt Shūkōkai Karate)
- **Solving Programming Problems** (1st place in behind the Scene and InCanity in MuKti '13 and 2nd place in Simplex in ANK '12)
- **Playing Chess** (3rd, 1st and 2nd position in Regional Sports meet in 2007, 2006 and 2005. Hence went to Nationals 3 times)
- Watching Movies & TV Shows
- Listening to music
- Football

Practice:-

Common Questions	Project 1	Report Designer	Project 3
Challenges		Complex model, object to ui	
Mistakes/Failures			
Enjoyed			
Leadership			
Conflicts			
What You'd Do Differently			

Data Structures	Algorithms	Concepts
Linked Lists	Breadth-First Search	Bit Manipulation
Trees, Tries & Graphs	Depth-First Search	Memory (Stack vs. Heap)
Stacks & Queues	Binary Search	Recursion
Heaps	Merge Sort	Dynamic Programming
Vectors I ArrayLists , Hash Tables	QuickSort	Big O Time & Space

bottlenecks
unnecessary work
Duplicated work

Power of 2	Exact Value (X)	Approx. Value	X Bytes into MB, GB, etc.
7	128		
8	256		
10	1024	1 thousand	1 KB
16	65,536		64 KB
20	1,048,576	1 million	1 MB
30	1,073,741,824	1 billion	1 GB
32	4,294,967,296		4 GB
40	1,099,511,627,776	1 trillion	1 TB