

# Sunil Kumar

I am a student of Master of Computer Science at the University of Victoria. I have 3 years of software development experience with software product companies. I am seeking co-op opportunities where I can fully use my skills for the success of an organization and learn new skills on cutting edge technologies in the industry.

## Education

**M.Sc. in Computer Science** Jan 2019 – Expected Dec 2020

University of Victoria, BC, Canada. – 7.33 / 9.0 GPA

Projects: Training a DQN agent for Coinrun ([github.com/Unimax/coinrun-dqn-pytorch](https://github.com/Unimax/coinrun-dqn-pytorch)) and Matchmaking for online multiplayer games ([git.io/JenE4](https://git.io/JenE4)).

**B.Tech. in Information Technology** Aug 2010-May 2014

NIT Durgapur, West Bengal, India. – 8.10 / 10.0 CGPA

Projects: Collage Study Point Website ([git.io/JenEB](https://git.io/JenEB)), Digital Clock on Multisim and Exploration bot.

## Technical Skills

- **Languages:** Java, JavaScript, Python, Golang, SQL, C, C++, PHP, CSS, HTML.
- **Tools & Frameworks:** Docker, Kubernetes, gRPC, Git, REST APIs, Google Web Toolkit (GWT), JDBC, Hibernate, Electron, Angular, Eclipse Modeling Framework (EMF), JasperReports, Excel.
- **Concepts:** OOPs, Data Structures, Deep Learning.
- **Operating Systems:** Linux, Windows

## Experience

**Technical Associate / Zillious Solutions, New Delhi, India.**

July 2018 – Dec 2018

- Developed a solution for a long-standing issue with java enum reaching its size limit, with minimum changes in the application.
- Added support for customizable vouchers and integrated multiple payment gateways including *Razorpay*, *Paytm*, etc.
- Integrated a pre-developed machine learning model into the application for finding duplicate hotels. Decreased the time for marking duplicate hotels by 90% in live search results for hotels.

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

June 2014 – Sep 2016

- Awarded with Excellence Award 2016 and won /tmp 2014 a 10 days 24x7 coding event.
- Majorly worked on Ameyo Report, a GWT based front-end, and Jasper based backend; This includes a UI renew, backend enhancements and automating the generation of *Transformers*, a data de-normalization component, by using EMF modeling.
- Created a report scheduler based on the Quartz library with support for centralized reporting and graphical reports.
- Increased performance for a large customer's reporting database by 90% using table partition and multicolumn indexes.
- Increased performance of a statics managing component by 60% using soft references based cache for reflective calls.
- Developed a context-aware report designer with the Front-end based on GWT with data populating based on EMF model instances and outputs a proprietary file format (.drxml) which converted by the backend into a JasperReports based object. It was used to give demos to international customers as a future project.
- Created *Magic Numbers*: Predicts hardware requirements (CPU, RAM, and HDD) based on customer functional requirements.
- Delivered components for the automation of the collection process for an Indian Bank. Implemented a fresh UI, Integrating Hitachi Content Platform (HCP) for report storage, created a custom SSO authentication server & various domain-specific features like *Centralized Exclusion*.
- Interviewed candidates, prepared questions and did the training for new employees for the 2016 and 2017 hiring seasons.

**Software Developer Intern / Morphing Machines, Bangalore, India.**

June 2013 – Aug 2013

- Designed and developed the front-end interface for a research project called 'Development of A Flexible Framework for A Network On Chip'. We wrote a research paper about it ([git.io/Jen9I](https://git.io/Jen9I)).

## Personal Interests

- **Video Games:** Won 2<sup>nd</sup> place in COBX and Aorus Land 2017 National DOTA 2 tournaments, 1<sup>st</sup> place in Playtonia Delhi and Indian LAN Gaming Cup Delhi DOTA 2 tournaments.
- **Karate:** Green belt in Shito Ryu Shūkōkai Karate.
- **Solving Programming Problems:** Won 1<sup>st</sup> place in *Behind the Scene* 2013, 1<sup>st</sup> place in *InCanity* 2013 and 2<sup>nd</sup> place in Simplex 2012.
- **Playing Chess:** 3<sup>rd</sup>, 1<sup>st</sup> and 2<sup>nd</sup> place in *Regional Sports Meet* in 2007, 2006 and 2005. Won a place in K.V. National Sports Meet.

## References

- **Sahil Gandhi** ([sahilgandhi2011@gmail.com](mailto:sahilgandhi2011@gmail.com)) – Product Evangelist, Ameyo (previously known as *Drishti-Soft Solutions*).
- **Dr. Hausi Müller** ([hausi@uvic.ca](mailto:hausi@uvic.ca)) – Professor, University of Victoria.