

Onkar Hoysala

Lead Engineer – VideoKen

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<https://onkarhoysala.com>

Senior Software Engineer, with experience developing a range of products: SaaS tools, simulation software, and policy research software. Also trained as a qualitative researcher.

Proficient in Python, Java, and various database technologies (RDBMS and NoSQL). Strong background in high & low-level design and development of backend technologies. Also experienced with HTML+JS+CSS.

EXPERIENCE

VideoKen

Lead Engineer

July 2017 – present

- Lead Engineer (full-stack) for the design, development and deployment of the reporting, analytics, and integrations dashboard.
- Developed the tracking and analytics pipeline customized to suit VideoKen's requirements.
- 'Topic Editing Tool': Lead the development of a tool to edit video indices.
- 'Dashboard Integrations': Integrated multiple video vendors such as Brightcove, YouTube, Kaltura, etc., with the VideoKen dashboard.
- Tech: **Python, Elasticsearch, Azure Data Services, PostgreSQL, AngularJS, Redis, Celery,**

IIT-Bangalore

Research Associate

April 2016 – March 2017

- Consulted with the Centre for Information Technology and Public Policy.
- Brought my experience in software development to evaluate "open information systems". This project was funded by IDRC.

Fields of View

Co-Founder and

Researcher

Feb 2012 – June 2016

- Co-founded the organisation. Responsible for developing simulation software for policy research.
- 'Communication Protocol Simulation', Team Lead: Developed a GIS based policy research software tool, funded by DST, Government of India. Currently being used in IIT-Bombay.
- 'Smart Campus', Senior Engineer: Project that simulated electricity consumption in buildings, to test energy saving strategies.
- 'Phoenix', Senior Engineer: A Java-based open-source agent-based distributed simulation platform.
- 'Electricity Market Game', Senior Engineer: Collaborated with TU Delft, Netherlands to develop a simulation tool to teach electricity markets.
- Tech: **Java, Python, PHP, RabbitMQ, PostgreSQL, Hibernate, PostGIS**

Centre for Study of Science, Technology and Policy

Research Associate

July 2010 – Jan 2012

Intern

Jan 2010 – June 2010

- 'Indian Energy Game', Lead Engineer: An online simulation-game.
- 'Disaster Management Simulation', Engineer: Worked with a multi-disciplinary team to develop a GIS based simulation for disaster planning.
- 'Gestalt', Engineer: A multi-agent simulation platform for emergency and disaster management simulations.
- 'Athena', Engineer: An open-source, customized library system integrated with a recommender system for the CSTEP library.
- Tech: **Java, JavaFX, QGIS, PostGIS, PostgreSQL, MySQL, JSP, PHP**

SKILLS

Programming Languages	Proficient in Python and Java. Experience with PHP, Perl and C++
Relational Databases	PostgreSQL, MySQL/ MariaDB
Datastores	Redis, Elasticsearch, Azure Storage, Azure Cosmos DB
Web Frontend	JavaScript, AngularJS, Bootstrap, jQuery, CSS
Web Backend Frameworks	Proficient in Django. Experience with SymfonyPHP and RoR.
Other tools	RabbitMQ, R, QGis, numpy, scipy
Agile practices	Scrum, Kanban, TDD, User Stories

EDUCATION

**M.S (by Research)
in Information
Technology**
IIIT-Bangalore
2014 - 2017

Thesis titled “The Quiet Politics of Data: A Case Study of an Academic Transportation Research Laboratory in India”. Examined what researchers using computational models and simulations do, when data are not readily available. The thesis was based on an ethnographic case study. The thesis was a result of situating my experience of developing simulation software, and working with large datasets, within the Science and Technology Studies (STS) literature.

Supervisors: Prof. Janaki Srinivasan and Prof. Bidisha Chaudhuri.

**B.E in Computer
Science**
RNSIT, Visweswaraya
Technological
University
2006 - 2010

Final-year project at the Centre for Study of Science, Technology and Policy (CSTEP). Developed ‘Athena’, a library system and a customized recommender system for CSTEP.

ADDITIONAL INFORMATION

- **VideoKen:** Senior member of the core team. Mentored Masters’ students with their thesis projects being carried out at VideoKen.
- **IIIT-B:** Presented peer-reviewed papers at International conferences and workshops. Recipient of the *Sarai Social Media Research Fellowship* to undertake thesis related research.
- **Fields of View:** Member of the board from 2014-2016. Participated in outreach activities and organising gaming-simulation sessions. Mentored junior researchers and interns from universities in Netherlands and India.
- **CSTEP:** Represented the organisation at multiple research workshops and trade events.
- **RNSIT:** Led the quizzing group ‘Trivial Pursuit’, and organised the first ever ‘Quizzers Anonymous’, one of the largest quiz fests in Bangalore.
- Languages known: English, Kannada and Hindi.

PUBLICATIONS

Chaudhuri, B., Dasgupta, P., **Hoysala, O.**, Kendall, L., & Srinivasan, J. (2017). Actor-Networks and “Practices” of Development: Impact of a weather information system in West Bengal. In *IFIP Working Group 9.4 Conference 2017*. [[Link](#)]

Narayanan, K., **Hoysala, O.**, & Srinivasan, J. (2016a). Moral Economy of the Digital in Transport: A Study of Ola Auto. 28th Annual Conference of the Society for the Advancement of Socio-Economics (SASE). Retrieved from <https://sase.confex.com/sase/2016am/webprogrampreliminary/Paper5058.html>

Narayanan, K. & Hoysala, O. (15 August 2016). With ola auto there is a shift in the way auto-drivers and passenger interact. The Hindu. Retrieved from <http://www.thehindu.com/business/Industry/'With-Ola-Auto- there- is-a- shift- in- the-way-auto-drivers-and-passenger-interact'/article14569780.ece>

Krishna, H., Hoysala, O., Palavalli, B. M., Ganji, M. K., & Subrahmanian, E. (2014). Modelling technology, policy and behaviour to manage electricity consumption. In *Proceedings of the IEEE Rio Humanitarian Technology Conference 2014*. [[Link](#)]

Hoysala, O., Murthy, A., Palavalli, B. M., Subrahmanian, E., & Meijer, S. (2013). Designing energy policy through the indian energy game. *International Simulation And Gaming Association*. [[Link](#)]

Palavalli, B., Krishna, H., **Hoysala, O.**, & Subrahmanian, E. (2012). Discovering communication protocols for inter-agency collaboration for emergency response. In *Bonds & Bridges. Facing the Challenges of the Globalizing World with the Use of Simulation and Gaming*. *International Simulation and Gaming Association*. [[Link](#)]