Deshraj Yadav

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EDUCATION

- **M.S., Georgia Institute of Technology** — Atlanta, GA
  Current GPA: 4.0 — *Aug. 2017 – Present*

- **B.Tech, JSS Academy of Technical Education** — Noida, India
  Aggregate: 78% with Hons., 9th Rank (or top-6%) in class — *Aug. 2012 - June. 2016*

FELLOWSHIPS AND AWARDS

- **Snap Research Scholarship recipient, 2017**
  One of 8 awardees, selected from a pool of 60+ applicants from across the world
- **Winner, VTHacks-IV, Virginia Tech, 2016**
  Secured first position in VTHacks-IV which had more than 75 participant teams
- **Travel Scholarship, Google Summer of Code Mentor Summit 2016, 2017**
  Awarded Travel Scholarship twice from Google for attending GSoC Mentor Summit
- **First runner-up, Summer Hackathon, 2014**
  Built windows phone based web browser which later on got more than 50,000 downloads
- **Prime Minister Scholarship Scheme, (2012 - 2016)**
  Awarded scholarship for three consecutive years from Ministry of Defense, India
- **National Means Cum-Merit Scholarship, (2009 - 2012)**
  Awarded scholarship for 4 years for securing 13th rank (top-0.00065%) in state level scholarship entrance exam

EXPERIENCE

- **CloudCV** — Atlanta, GA
  Team Lead — *Jun. 2016 - Present*

  - CloudCV is a thriving open-source community with 130+ contributors, 5000+ users across the different projects, 650+ forks and 1550+ stars on GitHub, thousands of lines of code, and financial/equipment support from Google, NVIDIA, Amazon and Virginia Tech.
  - Responsible for the design, development and maintenance of projects like Origami, EvalAI and Fabrik that enable researchers to build, compare and share start-of-the-algorithms.

- **Google Summer of Code (GSoC) 2015, 2016 and 2017** — Atlanta, GA
  Student Developer, Organization Mentor, Organization Administrator — *Mar. 2015 - August 2017*

  - In 2015, I was selected as GSoC student where I built authentication system, designed new database schema for CloudCV, wrote REST APIs for CloudCV and integrated NVIDIA's Deep Learning GPU Training System (DIGITS) framework to add support for workspaces.
  - In 2016, I served as GSoC Mentor where I mentored 2 students during the summer.
  - In 2017, I served as Organization Administrator where I was responsible for planning, design and development of all projects along with mentoring students.

- **Georgia Institute of Technology** — Atlanta, GA
  Graduate Research Assistant — *Aug. 2016 - Present*

  - Research on the problem of evaluation of Visual Dialog models focused on making these models more accurate, better understand human intentions, tendencies, and contexts.

- **Machine Learning and Perception Lab, Virginia Tech** — Blacksburg, VA
  Research Assistant — *June 2016 - May 2017*

  - Worked under the guidance of Dr. Dhruv Batra and Dr. Devi Parikh on research problems that lie at the intersection of Computer Vision, Machine Learning and Natural Language Processing.

- **Cityflo**   Mumbai, India
  Software Development Internship   *Dec. 2015 - Feb 2016*

  - Responsible for setting up an Test Driven Development for Continuous Integrations in the backend codebase which helped the whole software engineering team to spend more time on building new features rather than maintaining and fixing bugs and issues.

- **Siftr Labs**   Noida, India
  Product Development Internship   *Sep. 2015 - Dec 2015*

  - Developed an Android Application which communicates with beacons (Low energy Bluetooth devices) for indoor navigation in big offices and malls.

- **Fratmart**   Noida, India
  Backend Developer   *Aug. 2014 - Dec 2014*
  Started a venture when I was a sophomore. I was responsible for product design and development from scratch, managing the servers, database management and other backend scripting tasks.

Publications

- **Evaluating Visual Conversational Agents via Cooperative Human-AI Games**
  P. Chattopadhyay*, **D. Yadav***, V. Prabhu, A. Chandrasekaran, A. Das, S. Lee, D. Batra, D. Parikh
  AAAI Conference on Human Computation and Crowdsourcing (HCOMP) 2017, **Oral**
  (* denotes equal contribution)

- **Visual Dialog [visualdialog.org]**
  A. Das, S. Kottur, K. Gupta, A. Singh, **D. Yadav**, J.M.F. Moura, D. Parikh, D. Batra
  Computer Vision and Pattern Recognition (CVPR) 2017, **Spotlight**

- **It Takes Two to Tango: Towards Theory of AI's Mind**
  A. Chandrasekaran*, **D. Yadav***, P. Chattopadhyay*, V. Prabhu*, D. Parikh
  (* denotes equal contribution)

Teaching Experience

- **ECE 5424: Introduction to Machine Learning**   Fall 2016
  Teaching Assistant with Dr. Stefan Lee

Selected Projects

- **EvalAI [evalai.cloudcv.org]**
  Open source platform that aims to help researchers, students & data scientists to host & participate in various AI challenges; **60+ open source contributors; 1500+ issues & pull requests; 180+ forks; 380+ stars;**

- **Fabrik [fabrik.cloudcv.org]**
  Online collaborative platform to build, visualize and train deep learning models via a simple drag-and-drop interface; **715+ stars; 130+ forks;**

- **Visual Chatbot [visualchatbot.cloudcv.org]**
  Given an image, dialog history, and a follow-up question about image, the chatbot answers the next question

- **Grad-CAM Demo [gradcam.cloudcv.org]**
  Visual Explanations from Deep Networks via Gradient-based Localization

- **Visual Question Answering (VQA) Demo [vqa.cloudcv.org]**
  Given an image, a question related to that image, the model will predict an answer

- **InfoConnect [jssaten.org.in]**
  Student-Faculty interaction platform; **17000+ users; 20000+ notices uploaded; 5000+ daily active users**

Programming Skills

- **Languages**: Python, C, C++, C#, Javascript, Lua, MATLAB
- **Version Control**: Git
- **Databases**: MySQL, PostgreSQL, MongoDB, Elasticsearch, Redis, Couchbase
- **DevOps**: Docker, AWS EC2, EBS, RDS, S3, SQS, VPC, Nginx, Apache, Google App Engine
- **Frameworks**: Django Rest Framework, Flask, PyTest, Celery, RabbitMQ, Scrapy, OpenCV, Torch, PyTorch
- **Frontend**: HTML, CSS, Javascript, JQuery, AngularJS, Socket.IO, Material Design, Bootstrap
- **Mobile Applications**: Android, Windows Phone

Extra Curricular Activities

- **Head Organizer,** Google Developers Group, JSS Noida
- **General Secretary,** Nibble Computer Society, JSS Noida
- **Organizing Head,** JSS Hackathon 2015, JSS Noida (More than 350 students participated in this hackathon from various colleges)
- **Organizer,** Google Developers Group, New Delhi