

## EDUCATION

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- **Delhi Technological University** New Delhi, India  
• *B. Tech in Computer Engineering; (First Class with Distinction)* *Aug. 2013 – May. 2017*

## EXPERIENCE

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- **Uber** San Francisco, USA / Bangalore, India  
• *Software Engineer II* *July 2017 - Present*
  - **Uber Lite:** Conceptualized and developed the new Uber Lite app (optimized for poor network conditions and low-end smartphones) and drove it to a successful launch (10mn+ users). Built several core flows including pickups, push-streaming, authentication and payments.
  - **Network Optimizations:** Created and deployed state management architecture for diff/patch based network calls which reduced the payload of mobile realtime API endpoints by 90%.
  - **Battery Performance:** Led key investigation into app battery usage. Introduced optimizations in sensor activations that improved battery utilization by 80% and reduced uninstall rate by 10k users /day.
  - **Reliability & Quality:** Saved \$10 mn / year by improving fraud detection accuracy in payments.
- **Uber** San Francisco, USA  
• *Software Engineering Intern* *June 2016 – Aug 2016*
  - **Driver Growth:** Developed new mobile analytics framework to gain insights into onboarding conversion rate, driver cancellations and commuter experience.
- **IIIT Delhi** New Delhi, India  
• *Research Intern* *May 2015 – July 2015*
  - **Gait analysis:** Created data pipeline for individual silhouette extraction, dimensionality reduction & clustering from video footage of walking crowds.
  - **Dataset creation:** Recording and organizing different categories of crowds to create test-bed dataset.

## PUBLICATIONS & PATENTS

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- **POI based location co-ordination system [patent filed]:** Enhancements in pickup co-ordination between riders and drivers by intelligently recommending "interesting nearby" pickup points. *[project live in Uber & Uber Lite]*
- **Autonomous Pathfinding in Simulated 3D Environments [conference-paper]:** in *International Conference on Robotics and Artificial Intelligence*, Shanghai, China, Dec, 2017

## PROJECTS

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- **Prime Minister's Office Mobile App:** Winning proposal in a nation-wide contest by the Indian PMO aimed at improving government transparency. Collaborated with Google, National Informatics Centre and the Prime Minister's Office to productionize these ideas.
- **Music-centered speech therapy in autism:** Worked with psychologists at the National Brain Research Center (New Delhi) to create a mobile app that provided a speech learning framework for children on the autism spectrum. Deployed in special-needs schools across the state to assist educators.
- **Currensee:** Mobile app to aid visually impaired users in daily cash transactions. Camera input fed into a neural network for live offline currency recognition. *[winner in "Inclusive STEM" Accessibility Hackathon]*
- **Depth estimation from RGB:** Trained CNN models to determine approximate depth from RGB images. Created pipeline to generate ground truth data from game engine environment containing randomized 3D models.
- **HackerHire:** A tech-interviewing platform with web code compilation and collaborative features like live canvas, shared text editing and decentralized video conferencing using WebRTC.
- **DTU Maps:** An intra-college map and search engine built entirely on crowdsourced data. Within a week of launch, it provided a near-exhaustive repository of campus metadata.

## PROGRAMMING SKILLS

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- **Languages:** Java, Python, C++, Bash, SQL **Technologies:** RX, TensorFlow, Spark, React, Kafka