Shubham **Dokania**

Software Developer · Full Stack Developer

WP-42 C, Pitampura, New Delhi, India

(+91) 8860702606 | shubham.k.dokania@gmail.com | http://shubhamdokania.me | shubham1810 | shubhamdokania

Education

Delhi Technological University(Formerely DCE) — *New Delhi, India*

B.Tech. in Mathematics and Computing Engineering — *Aug. 2013 - PRESENT*

North Delhi Public School — *New Delhi, India*

AISSCE (All India Senior School Certificate Examination) — *Apr. 2011- May. 2013*

Skills

Programming	Python, C++, C, Java, MySQL, JavaScript, Shell, MATLAB, LaTeX, HTML
Frameworks & Libraries	Django, Flask, Theano, OpenCV, Keras, Numpy, Scipy, Play Framework, OpenGL
Familiar	C#, Node.js, Android, MongoDB, Unity3D, Lua

Experience

Evolutionary Computing and Research Lab, DTU — *New Delhi, India*

Undergraduate Researcher — *Sept. 2015 - PRESENT*

- Studied various evolutionary optimization algorithms and their implementation on multi-dimensional objective functions.
- Working on development of new and robust algorithms for global optimizations in multi-dimensional search space.

Greplr — *New Delhi, India*

Co-Founder & Full Stack Developer — *May. 2015 - PRESENT*

- Developed a hyper-local discovery platform and service aggregation application.
- Built REST APIs to support android application using Flask(Python Framework) and Parse for DataBase backend and analytics.

Omnipresent Robot Tech. — *New Delhi, India*

Software Engineering Intern — *July. 2015 - Aug. 2015*

- Built a cross-platform application called speedobitiX using Qt Framework for Python.
- Application enables students to build robots without writing code and graphical logic controls.

Projects

RNN and LSTM based Text Generation — *New Delhi, India*

Machine Learning, Natural Language — *Nov. 2015 - Dec. 2015*

- Created a Neural Network model based on RNNs and LSTMs to understand a given text and based on the text pattern, produce small sentences.
- Written in Python using Keras and Theano Libraries. Deployed on a VPS with logging to monitor progress.

Genetic Evolution in Game Playing Bots — *New Delhi, India*

Evolutionary Algorithms, Game Theory, Neural Networks — *Sept. 2015 - Oct. 2015*

- Created a Genetic Evolution based Tic-Tac-Toe playing bot which evolves on the principle of natural selection.
- Built Using Python and Numpy library. Learned about evolutionary algorithms and role of genetic programming in optimizations.

Food Requirement Simulation and Prediction — *New Delhi, India*

Data Science, Server — *Oct. 2015*

- Developed a web dashboard to display structured data for food consumption and wastage for the NGO Akshaya Patra.
- Food requirement predictions were made using previous student attendance data based on a Simple Regression model.
- Also built a server in Django(Python Framework) to provide API for Database access and Predictions. The prototype won the Grand Prize award at CodeForIndia 2015 Hackathon.

Autonomous Robot Navigation System Using Kinect *New Delhi, India*

Computer Vision, Embedded Systems *Mar. 2015 - May 2015*

- Built an autonomous robot and designed it's obstacle avoidance and navigation system using OpenCV Python library.
- Analyzed performance results on different development boards (Raspberry Pi, BeagleBone Black etc.) by running the python scripts and optimizing computations for better performance.
- Used Depth maps and pixel intensity calibrations to compute distance of multiple obstacles and calculate a feasible path.

Honors & Awards

Oct. 2015 **Grand Prize Winner**, Code For India Hackathon *New Delhi, India*

July 2015 **Grand Prize Winner**, HackIndia 2015 *Bangalore, India*

Apr. 2015 **1st in Track**, PolicyHacks by EPoD, Harvard University *New Delhi, India*

Mar. 2015 **3rd Position**, </geekfest> 2015 by 91SpringBoards and IBM Bluemix *New Delhi, India*

Mar. 2015 **Special Mention**, Byldathon at IIIT Delhi *New Delhi, India*

Oct. 2013 **Best Student Award**, The Times of India(TOI) *New Delhi, India*

Aug. 2010 **2nd in State**, National Science Talent Search Examination *New Delhi, India*