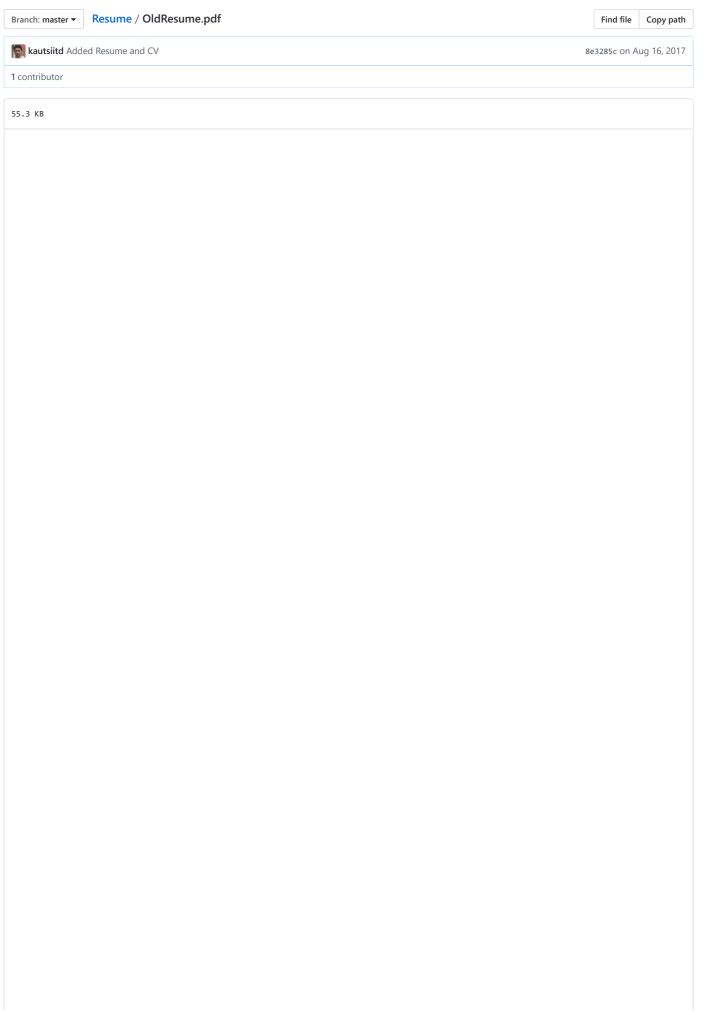
# Resume |





# KAUTSYA KANU



	ACADEIVIIC DETAILS				
Year	Degree / Exam	Institute	GPA/Marks(%)		
	B.Tech in Production and Industrial Engineering	Indian Institute of Technology Delhi	7.818		
2012	CBSE	R K V M Gwalior	89.4%		
2010	U P Board	D D S V M Budaun	87.0%		

SCHOLASTIC ACHIEVEMENTS				
• Minor Degree in Computer Science : Completed 17 credits in Computer Science with GPA 8.6/10	Present			
• IIT Joint Entrance Examination : Secured 1329 (GE) rank among half million candidates	2012			
• All India Engineering Entrance Examination : Bagged 99.5 percentile among 1 million candidates				
• U P Board Merit: District Topper and Second in Bareilly zone in High School Examination				
• Honor Certificate: Awarded by Director, Science & Tech. Board UP for securing 100% marks in Maths	2010			

# **INTERNSHIPS**

- Zimply, New Delhi (May, 2015 July, 2015) :
  - o Added an extension for extracting images from Excel sheet, using VBA (Macros), decreased time by manifold
  - · Modified Image compression on EC2 Server using PIL and Cron, reduced downloading time on app efficiently
  - o Designed and Created Image Tagging, Chat-Box and modelled Database in Django Framework of python
  - o Proposed and Developed a Software with GUI in Tkinter python for Image operations, quartered effort and time
  - Worked on Data compression algorithms Huffman, Arithmetic encodings, analyzed more than 10 Image formats and suggested 20% more optimal PJG format for Image compression compared to preceding format JPEG
    Extended PPO (Pre-Placement Offer) from organization for value added to company during internship

### **PROJECTS**

- Development of Artificial Intelligent Virtual Game Player and Designed GUI:
  - Implemented MiniMax and Alpha-Beta pruning with Heuristics and achieved 5-ply for Quoridor Game (Apr 2015)
  - Conceptualized BOT with 3-ply and Designed GUI for n\*n "TIC TAC TOE" and "2048" in python (Jan 2013-Apr 2013)
- Bayesian Network Learning for Estimation of missing Data (Apr, 2015) :
- o Learnt the Bayes net on healthcare dataset of more than 11000 patient records over 8 modelled diseases
- o Predicted using Expectation maximization algorithm and achieved less than 25% learning error from golden data
- Multiple Sequence Alignment for DNA and Proteins (Jan, 2015) :
  - Implemented IDA\*, DFSBnB for optimal solution and Clustal W with hill climbing for sub-optimal solution
  - o 1st Runner-up in sub-optimal solution with less than 5% error from optimal solution among 142 students
- Formulated NP class problem into CNF SAT formula and solved using SAT Solver named MiniSat (Feb 2015)
- . Designed a Processor in Logisim for interpreting Simple RISC Assembly Language (Apr 2015)
- 3D Topology Generation and Simulation of Grinding Wheel, B Tech Thesis (Jan, 2015 Present) :
  - Generated active grain profiles using Image processing and Texture mapping on topographical projections
  - o Adapted Edge detection Canny algorithm, implemented Z Stack Method and estimated topology in MATLAB
  - · Creating metal removal simulation for predicting kinematic interaction between grinding wheel and workpiece

### **TECHNICAL SKILLS**

- Relevant Courses: Intro. To Computer Science, Data Structure, Artificial Intelligence, \*Analysis and Design of Algorithms, Computer Architecture, Operation Research, Econometric Methods, Digital Electronics, Signal and System \*Course pursuing this semester
- Programming Languages: C++, Python, C, Django, HTML, CSS, JS, mysql, VBA (macro), Verilog, Simple Risc OS and Softwares: Ubuntu, Windows, Linux, MATLAB, Logisim, Solidworks, AutoCAD, Creo, Ansys, CES

#### **EXTRA CURRICULAR ACTIVITIES**

- Competitive Coding :
  - Positioned among **Top 3** solvers in an optimization problem among **6000+** coders on **CodeChef** (
- (Jun, 2015)
  - Accomplished 148th Global Rank among 8000 contestants in long contest, organized by CodeChef (Jan, 2015)
  - Ranked 24th in IIT KGP online contest among 1600 worldwide participants, sponsored by HackerEarth (Oct, 2014)
  - Two time Winner in IIT Delhi Coding Club organized by ACES-ACM, sponsored by HackerEarth (Sep & Nov, 2014)
  - Currently ranked 289 among 43000 coders on CodeChef; max. rated BLUE (Expert) on CodeForces
- Other Interests: Solving logical puzzles, Coding, Chess, Theoretical Physics, Sketching