

Kautsya Kanu

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EDUCATION

I.I.T. DELHI

BTECH IN PROD. AND INDUSTRIAL
Jul 2016 | GPA: 7.84/10

MINOR IN COMPUTER SCIENCE

Jul 2016 | GPA: 8.18/10

12TH CBSE

May 2012 | Percentage: 89.4

10TH U.P. BOARD

May 2010 | Percentage: 87.0

LINKS

Github:// [kautsiitd](#)

LinkedIn:// [kautsya-kanu-a0328293](#)

CodeChef:// [kauts_kanu](#)

CodeChefDiscuss:// [kauts_kanu](#)

StackOverflow:// [kautsya-kanu](#)

SKILLS

LANGUAGES

Swift	★★★★	Python	★★★★☆
L ^A T _E X	★★★★☆	Obj-C	★★★☆☆
C++	★★★☆☆		

OTHER:

Java • SQL • Shell • VBA • Verilog
JSON • XML • HTML • CSS • JS

TOOLS

Git • SourceCode • Xcode • Django

OS

MacOS • Ubuntu • Linux • Windows

TEST SCORES

IIT JEE

Jul 2012 | 1329(GE)/5 million+

AIEEE

Jul 2012 | 99.5 percentile

UP BOARD MERIT

May 2010 | District Topper

HONOR CERTIFICATE

May 2010 | Awarded by Director of
Science & Technology Board,UP
for securing 100% marks in Maths

COURSES

Artificial Intelligence
Natural Language Processing
Machine Learning
Analysis and Design of Algorithms
Computer Architecture
Database Management System

EXPERIENCE

OYO | IOS DEVELOPER | [LINK](#)

Dec 2017 - Jul 2018 | Gurgaon, India

- **Mentored** an Intern & new hire; **Interviewed** many candidates for iOS Team
- Managed stake holder across **4+** teams to deliver Wizard, Search and **10+** projects
- Experienced Obj-C & moved to Swift while exploring **VIPER** from **MVC**
- Dug into **Core Graphics**, IBDesignable, IBInspectable & lower-level CG APIs
- Handled **Multi-Threading**, **Serial & Concurrent Queues** for Search Project
- Suggested & Implemented UX improvements increasing notification subscriptions

CODECHEF DISCUSS | VOLUNTEER TEACHER | [LINK](#)

May 2017 - Nov 2017 | Bangalore, India

- Wrote Editorials and helped other competitors through **200+** posts
- Secured among **Top 3** contributors out of **8000+** contributors

HEADOUT | IOS DEVELOPER | [LINK](#)

Jun 2016 - Apr 2017 | Bangalore, India

1K+ Ratings: 4.7/5

- **Sole developer** of iOS App while **Featured** on App Store in **Travel** category
- Explored **Swift from scratch**, Migrated to **MVVM** from **MVC** Architecture
- Worked with **Singleton**, **Decorator Design Patterns** and **OOP, POP, KVO** and **KVC**
- Owned **10+** projects like Similar Products, Lottery, Banners, Gift Cards, Referrals & other to **increase conversion** followed by **AB-Experiments** and **Google Analytics**
- Featured with **Peek & Pop**, **Quick Actions**, **Deep Linking**, **Spotlight & Apple Pay**
- Migrated & Revamped to **XIBs & Storyboards** for auto layout & faster development
- Dived into **ARC** and **XCode Developer Tools** for **Memory Leakage** & System Usage
- Built game using **SpriteKit** and Nearby Products Searching Feature in Hackathon
- Introduced **SwiftLint** enforcing Swift conventions, Markups and Documentation

ZIMPLY | BACKEND DEVELOPER INTERN

May 2015 - Jul 2015 | Delhi, India

- Created **Image Tagging**, **Chat-Box** and modeled Database in **Django**
- Developed **Software** with GUI for offline Image operations using **Tkinter & PIL**
- Worked on Image Compression algorithms, modified on **EC2** server using **Cron**
- Added an **Extension** for Image Extraction from Excel using **VBA**

IOS PROJECTS 2019

FLICKR | [LINK](#)

- Experimented with **CollectionView Layouts**, Implemented **Mosaic Layout**
- Introduced **Cast Free Swift**, **Image Parallax**, Transitions and **Regex**
- Handled **HTML Attributed string**; Featured with **Search while typing**

NEWSAPP | [LINK](#)

- Implemented **Infinite Scrolling** using paginated public News APIs
- Assimilated Data Persistence along with **Concurrency** using **CoreData**
- Worked on **Library** for **Image Persistence & Caching** along **DispatchQueue**

CALENDAR | [LINK](#)

- Explored **Predicate**, **SortDescriptor**, **FetchResultsController** in **CoreData**
- Featured with **Local Authorization**, **Pan Gesture** for transitions & **Widgets**
- Including **Local Notifications**, **Location APIs** along with **TODOs**

Interested to Explore **Unit Testing**, **RxSwift**, **React-Native** and **SwiftUI** in Future

COMPETITIVE PROGRAMMING

Sep 2017	Ranked 7 th /9500+	Long Contest by CodeChef
Sep 2017	Two times Top 3/9500+	Optimization problem by CodeChef
Nov 2014	Two times Winner	IIT Delhi Coding Club organized by ACES-ACM
Oct 2014	Ranked 24 th /1600+	IIT KGP online contest sponsored by HackerEarth
CodeChef: Orange Rated (Top 0.2%) CodeForces: BLUE(Expert) CodeChef Discuss: Among Top 100		

RESEARCH PAPER

KAUTSYA K., SAYANTAN S. "UNSUPERVISED DECOMPOSITION OF MULTI AUTHOR DOCUMENT".
Exploiting the Difference of Syntactic Writing Styles. Published on Semantic Scholar 2019. | [LINK](#)

Mar-May 2016 | Prof Mausam, IIT Delhi, Affiliate Faculty University of Washington

- Researched on Independent Robust Approach with Improved Accuracy over a paper "A generic unsupervised methods for decomposing multi-author documents, N. Akiva and M. Koppel 2013" as [baseline](#).
- Investigated role of feature selection that captures syntactic patterns specific to an author, on baseline
- Introduced **PQ-Grams, POS tagging & TFIDF** based features on unlexicalized PCFG to capture distinct writing styles
- Elicited Segments using GMM, Trained Multinomial Naive Bayes classifier over Vital Segments using sk-learn in python

PROJECTS

Apr 2015	ARTIFICIAL INTELLIGENT VIRTUAL GAME PLAYER WITH GUI	LINK
Feb 2013	Implemented MiniMax and Alpha-Beta pruning with Heuristics and achieved 5-ply for Quoridor Game. Conceptualized BOT with 3-ply and Designed GUI for n*n TIC TAC TOE and 2048 in python.	
Apr 2016	NAMED ENTITY RECOGNITION FOR REAL ESTATE	LINK
	Trained CRF Model using MALLET over tokenized Real Estate data of Delhi NCR for entity identification Used Gazetteers related to locations, first and last names, POS tagging and RegEx as features of words Explored Word Embeddings found using Word2Vec model on unlabeled corpus, to achieve high F score	
Mar 2016	UNSUPERVISED AND SUPERVISED HAND WRITTEN DIGIT RECOGNITION	
	Compared kMeans with PCA & GMM learned using EM algorithm with PCA for Unsupervised clustering Learned Neural Network using Back Propagation in PCA space for Supervised Clustering using PyBrain Tried to use Convolutional Neural Network and Auto Encoders for better Supervised Clustering	
Jan 2016	SENTIMENT MINING AND DOMAIN ADAPTATION ON TWITTER DATASET	LINK
	Extracted feature words using Lemmatization & Stemming and Removed Stop Words Normalized words with intensely repeating letters, used TFIDF based weighting for high frequency words Created sentiment vectors based on unigrams, bigrams of featured words comprising classification space Explored SVMs and Logistic Regression with L1 regularizer on vectors, trained using n-fold Cross Validation	
Sep 2015	BAYESIAN NETWORK LEARNING FOR ESTIMATION OF MISSING DATA	LINK
	Learned the Bayes net on healthcare dataset of more than 11000 patient records over 8 modeled diseases Predicted using Expectation maximization algorithm and achieved less than 25% learning error	
Apr 2015	DESIGNED A PROCESSOR IN LOGISIM, INTERPRETED RISC ASSEMBLY LANGUAGE	LINK
Feb 2015	FORMULATED NP CLASS PROBLEM INTO CNF SAT FORMULA, SOLVED USING MINISAT	
Jan 2015	MULTIPLE SEQUENCE ALIGNMENT FOR DNA AND PROTEINS	LINK
	Implemented IDA*, DFSBnB for optimal solution, Clustal W with hill climbing for sub-optimal solution Runner-up in sub-optimal solution with less than 5% error from optimal solution among 142 students	

B.TECH. THESIS

3D TOPOLOGY GENERATION AND SIMULATION OF GRINDING WHEEL

Jan 2015 - May 2016 | Prof Sudarsan Ghosh, Associate Professor, IIT Delhi

- Generated active grain profiles by Image processing and Texture mapping on topographical projections
- Adapted Edge detection Canny algorithm, implemented Z Stack Method, estimated topology in MATLAB
- Simulated metal removal for predicting kinematic interaction between grinding wheel and workpiece