

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^AT_EX ★★★★★☆ 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

SAAVN | IOS DEVELOPER | [LINK](#)

Feb 2020 - Present | Mumbai, India

- **Mentoring** new hires, being part of **cosmopolitan** environment of **5+ countries**
- Explored **AVFoundation** and Integrated FB's **AsyncDisplayKit** for **Video Rendering**
- **Extended AsyncDisplayKit** for **Video Caching, Persistence & Garbage collection** in **multi-threaded** environment optimised using **CoreData & CoreFileManager**
- Implemented **Instagram Grid Layout**, embedded Video Layers and Infinite Scrolling
- Dived into **Instruments, SignPosts** profiling performance & Tried out **CoreMotion**
- Working on **Backend Driven Dynamic layout**, UI based on server response

#4 in Music

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

#3 in Travel

173.4K+ Ratings: 4.7/5

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

- **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**
- Built game using **SpriteKit** and Nearby Products Searching Feature in Hackathon
- Introduced **SwiftLint** enforcing Swift conventions, Markups and Documentation

1K+ Ratings: 4.7/5

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

[CUSTOMIMAGEVIEW](#) [FLICKR](#) [NEWSAPP](#) [CALENDAR](#)

- Created **Dynamic Library** alternative of **SDWebImage** for **Image Persistence, Remote Fetching, Caching**, Loader Handling & Animations along **DispatchQueue**
- Assimilated Data Persistence along with **Concurrency** using **CoreData**
- Explored Predicate, SortDescriptor, **FetchResultsController** in **CoreData**
- Implemented **Infinite Scrolling**, Featured with **Search while typing**
- Introduced **Cast Free Swift, Image Parallax** & Pinterest like **Mosaic Layout**
- Featured with **Local Authorization, Pan Gesture** for transitions & **Widgets**
- Working on **Local Notifications, Location APIs** along with **TODOs** in **Calendar**

COMPETITIVE PROGRAMMING

Sep 2017
Sep 2017
Nov 2014
Oct 2014

Ranked 7th/9500+
Two times Top 3/9500+
Two times Winner
Ranked 24th/1600+

Long Contest by CodeChef
Optimization problem by CodeChef
IIT Delhi Coding Club organized by ACES-ACM
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](#)
Implemented MiniMax and Alpha-Beta pruning with Heuristics and achieved 5-ply for Quoridor Game.
- Feb 2013 | 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