

Thingom Bishal Singha

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EDUCATION

National Institute of Technology Karnataka, Surathkal

May 2016 | Mangalore, India

B.Tech. in Computer Engineering

GPA : 7.17 / 10

Kendriya Vidyalaya, Hebbal

May 2012 | Bangalore, India

Senior School Certificate (CBSE)

Score : 94.6 %

SKILLS

Languages:

Python, C, C++, Java, C#,
Visual Basic, Powershell

ML Libraries:

Keras, Tensorflow, NLTK,
Scikit-learn, Pandas

Web Development:

HTML5, CSS3, PHP

Databases:

BigQuery, SQL Server

11.15.2017

EXPERIENCE

Visa Inc.

Software Engineer

Aug 2016 – present

Bangalore, India

- Led multiple Performance engg. projects for the Merchant and Acquirer Processing Platform, achieving a 100% success rate in production.
- Developed toolset to automate Environment validation and correction, reducing manual effort on each run from 2 working days to 2 hours.
- Developed regression tool to generate automated reports on usage of system resources.

JPMorgan Chase & Co.

Technology Intern

May 2015 – July 2015

Bangalore, India

- Built an audit preparation tool to generate a checklist of tasks and predict the next audit period using relational DBMS and linear regression.

PROJECTS

Person Recognition using Smartphones' Accelerometer Data

[arXiv](#)

Under review at 24th IEEE National Conference on Communications

Designed a model to recognize a person using Random Forests, following feature analysis in time and frequency domains. Experimental results outperformed existing models with an accuracy of 96.79% and AUC of 98.22%.

BookSim for Multi-layered Networks

[GitHub](#)

Modified the existing dimension ordered routing algorithm to accommodate multiple layers, and isolated the configurations for each dimension. The modified version was thus able to simulate multi-layered networks and successfully reflect the smaller latency for the inter-layer connections.

Pokemon Type Classification using Transfer Learning

[GitHub](#)

Fine tuned the VGG16 Convolutional Neural Network to determine the type of a Pokemon, given its image. Using image augmentation and transfer learning on a limited dataset of 3500 images, the resultant model delivered an accuracy of 0.396. on an 18-class classification problem.

Similarity of Songs' Lyrics across Genres and Times

[Wordpress](#) | [GitHub](#)

Tf-idf vectorization was applied on the song lyrics, and then the Euclidean distance between the vectors was calculated. Pairwise k-medoids clustering was applied on the resultant graph and the similarity of genres/decades was determined based on the clustering results.

Circles of Parity using Hamiltonian Cycles

[Wordpress](#) | [GitHub](#)

Modified the cost-function of Held- Karp algorithm to the longest edge in the cycle for extracting the earliest "circle of parity" (Hamiltonian cycle) in a graph representing game results in a league season. The number of circles of parity was determined using edge-disjoint Hamiltonian cycles.

Hawkeye Visualization using graphics.h

[GitHub](#)

Visualized LBW in cricket using inputs from two planes and parabolic motion for ball trajectory. Depth visualization was achieved by varying measures in x and y dimensions as a linear function of measures in z dimension.