

# CHINMAYA LAD

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 Buffalo, NY

 chinmaylad

 ChinmayaLad

## EXPERIENCE

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### SOFTWARE DEVELOPER

#### Mirraw Online Services

 Nov 2016 – June 2018

 Mumbai, India

- Examined server-side security vulnerability and feature development on **Ruby on Rails** framework.
- Ownership of Android Development, improved feature usability and implemented UX enhancement for the application
- Optimized GPU rendering performance leading to improved play-store ranking of the app.
- Restructured code base for better performance and minimized code redundancy.
- Introduced modular approach and proper coding standards in project for re-usability and understanding.
- Revamped and Developed Application UI.

### DEVELOPMENT INTERN

#### e-Yantra, IIT Bombay

 May 2015 – July 2015

 Mumbai, India

- Developed “Fireblocks” (Embedded Programming Tutor).
- Implemented Web application using **PHP Laravel Framework** along with Google’s **Blockly Library**.
- Implemented server-side code generation and compiling mechanism.

## ACADEMIC PROJECTS

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### MANGA COLORIZATION USING cGAN

- Developed an application for coloring black & white Manga images using Conditional Generative Adversarial Networks.
- Implemented **U-Net** architecture along with skip-connections for the generating the colored images and **Patch-GAN** architecture as discriminator between the colored image and the real image.

### EXPLAINABLE AI

- Developed a system that detect same writers based of pairs of handwriting samples provided.
- Developed an architecture that learns **explainable features** for writers handwriting domain while learning to answer various queries for that domain.
- The architecture consisted of combination of deep learning model along with probabilistic graphical model.
- The deep learning model is an **Auto-Encoder** which provides **latent representations** of the handwriting samples which are then used to predict the explainable features of the samples.

### CLASSIFICATION OF HANDWRITTEN DIGITS

- Implemented Logistic Regression, Neural Network, Random Forest and SVM methods and combined them using boosting technique on MNIST dataset for training and testing.
- Tested the model on USPS dataset to validate “No Free Lunch Theorem”.

### AMAZON DYNAMO STYLE STORAGE

- Designed a distributed **key-value** storage system using Android emulators as distributed servers.
- Implemented partitioning, linearizability, replication and failure handling similar to Amazon Dynamo.

### KEY THRESHOLDING

- Implemented **Shamir’s Secret Sharing Algorithm** for key thresholding using **Lagrange’s Interpolation** and **Elgamal Encryption** as encryption base.

## EDUCATION

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### Master of Science (Computer Science)

#### University at Buffalo

 Aug 2018 – Feb 2020  Buffalo, NY

### Bachelor of Engineering (Computer Engineering)

#### University of Mumbai

 Aug 2012 – July 2016  Mumbai, India

## TECHNICAL SKILLS

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- Java, Python, Ruby, and C.
- Keras, Tensorflow, Crypto, OpenCV.
- Ruby on Rails, Laravel, Django.
- SQL, MySQL, PostgreSQL.

## SOFTWARE SKILLS

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- Eclipse
- Android Studio
- Linux OS (Fedora/Ubuntu/CentOS)

## ACHIEVEMENTS

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 1<sup>st</sup> place in e-YRC 2015

 1<sup>st</sup> place in e-Yantra Robotics Competition for theme Warehouse Management organized by e-Yantra, IIT Bombay.