

# **ABOUT THE COMPANY**

Coding Samurai is a pioneering EdTech startup founded in August 2022 with a mission to bridge the gap between academic knowledge and industry expectations, Coding Samurai offers a comprehensive ecosystem of IT services, technical training internships, and consultancy solutions designed to empower students, professionals, and businesses alike.

# **Our Vision**

At Coding Samurai, we envision a future where practical skills and innovation drive success. Our mission is to equip aspiring tech professionals with real-world expertise and help businesses harness the power of technology to thrive in an ever-evolving digital landscape.

# **What We Do**

Technical Internships for Aspiring Professionals. Our flagship technical internship programs are designed to provide hands-on learning experiences that go beyond traditional academics. Through live projects and mentor-led guidance, students develop a deep understanding of industry-relevant tools, technologies, and problem-solving approaches. From web development and data science to machine learning and game development, our diverse offerings cater to a wide array of technical domains, empowering participants to tackle real-world challenges confidently.

# **IT Services to Transform Businesses**

Coding Samurai also offers a suite of IT services, enabling businesses to leverage cutting-edge technology for growth and efficiency. Our services include:

**Website Development:** Crafting responsive and high-performance websites tailored to business needs.

**Mobile App Development:** Designing intuitive apps for iOS and Android to enhance customer engagement.

**UI/UX Design:** Creating seamless user experiences through research-driven designs.

**Graphic Design:** Delivering compelling visuals that resonate with audiences.

**Video Editing:** Producing impactful videos to communicate powerful stories.

# **IT Consultancy Services**

Our consultancy solutions empower organizations to streamline operations, improve efficiency, and achieve their business goals. With a focus on innovation, we guide businesses in adopting technologies that create value and drive results.



# **INSTRUCTIONS FOR SUBMISSIONS**

#### 1. Project Submission Form

A project submission form will be shared via email later. In the meantime, continue working diligently on your assigned tasks and projects.

#### 2. Task and Project Requirements

• Machine Learning Internship: Complete at least two projects for successful completion of the internship. The projects can be from the same level or different levels, as per your preference.

#### 3. Uploading Work to GitHub

- Create a GitHub repository named "CODING SAMURAI INTERNSHIP TASK."
- Upload all completed tasks or projects to this repository.
- The repository link will need to be submitted via the project submission form.
- For UI/UX Design Interns, they can upload their work on dribble or behance or any other design platfroms
- SAMPLE GITHUB REPOSITORY- GITHUB DEMONSTRATION

#### 4. Create and Share a Demonstration Video

- Record a video showcasing your work. The video should demonstrate your efforts and contributions to the tasks or projects.
- Post this video on LinkedIn to build credibility and serve as proof of your work.
- Tag Coding Samurai in your LinkedIn post.
- Include the hashtag #CodingSamurai for uniformity and visibility. You may also use additional hashtags like #Internship and #AppDevelopment for greater reach.
- SAMPLE VIDEO SUBMISSION- Video demonstration

#### 5. Utilize Online Resources

Feel free to use resources such as Google Search, online tutorials, and instructional videos to aid your learning and task completion.

#### 6. Rewards for Outstanding Performance

The best interns will receive:

- A Letter of Recommendation (LOR).
- A chance to win a **stipend** for outstanding performance.
- **Feature recognition** on Coding Samurai's official page for exceptional contributions.

# **Machine Learning**

## **Level 1: Beginner (Basic Concepts and Skills)**

## **Project 1: Predict House Prices Using Linear Regression**

- Description: Use a simple dataset to predict house prices based on features like area, number of rooms, and location using linear regression.
- **Skills**: Data preprocessing, regression models, evaluation metrics.
- Video Reference: <u>House Price Prediction with Python and Linear Regression</u>

## **Project 2: Iris Flower Classification**

- Description: Build a classification model using the Iris dataset to predict the species of a flower based on its features (sepal and petal dimensions).
- **Skills**: Data exploration, classification models, visualization.
- Video Reference: Iris Flower Classification using Python

# **Level 2: Intermediate (Slightly More Involved)**

#### **Project 3: Sentiment Analysis on Tweets**

- Description: Perform sentiment analysis on a dataset of tweets to classify them as positive, negative, or neutral using Natural Language Processing (NLP).
- **Skills**: Text preprocessing, vectorization, NLP models.
- Video Reference: <u>Sentiment Analysis in Python</u>

#### **Project 4: Handwritten Digit Recognition Using MNIST**

- **Description**: Use the MNIST dataset to train a neural network for recognizing handwritten digits.
- Skills: Neural networks, image preprocessing, evaluation metrics.
- Video Reference: <u>Handwritten Digit Recognition using Python and Keras</u>

# **Level 3: Advanced (Simplified)**

### **Project 5: Customer Churn Prediction**

- **Description**: Build a machine learning model to predict whether a customer will churn based on behavioral and demographic data.
- Skills: Feature engineering, classification, model tuning.
- Video Reference: <u>Customer Churn Prediction with Python</u>

## **Project 6: Image Classification Using Transfer Learning**

- **Description**: Use a pre-trained convolutional neural network (like ResNet or VGG16) to classify images from a custom dataset.
- Skills: Deep learning, transfer learning, image classification.
- Video Reference: <u>Transfer Learning for Image Classification</u>

# Purpose of the Internship: Learn and Grow

#### **Autonomy and Responsibility**

We respect your independence. It is entirely your decision whether to seek guidance or proceed on your own.

#### **Challenge and Professionalism**

The tasks assigned may appear simple or complex. Regardless, we expect you to approach them with professional diligence and dedicate the necessary attention they deserve.

This internship is designed to foster learning, growth, and practical experience.

# **CONNECT WITH US**

- 1) WEBSITE- www.codingsamurai.in
- 2)LINKEDIN- Coding Samurai
- 3) EMAIL- support@codingsamurai.in
- 4)TELEGRAM- Coding Samurai