# Sushant Aryal

# Hattiesburg, MS 39406

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Linkedin 
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Portfolio

## Education

## The University of Southern Mississippi

Hattiesburg, MS

B.S. in Computer Science and Mathematics

Expected May 2027

Coursework: Machine Learning, Linear Programming, Data Analysis, Probability, Secure Software Development, OOP

Awards: Honors Scholar, President's List

Cornell University, summer class in Machine Learning Foundations

August 2025

# Technical Skills

Python, JavaScript, TypeScript, C++, React, React Native, Node.js, Express.js, MongoDB, MySQL, SQL, TensorFlow, AWS, Clerk, Git, HTML/CSS, Linux

## Experience

# AI & Machine Learning Fellow

May 2025 - Present

Cornell Tech

Remote

- Selected from 3000+ applicants for the BreakThroughTech AI program at Cornell Tech
- Participated in 12 month long program including Machine Learning Coursework with Cornell faculty, experimental learning experiences, and mentorship from industry professionals

## Software & Data Science Intern

May 2025 - July 2025

Delta Health Alliance

Greenwood, MS

- Developed and taught a full Python curriculum to 40+ high school students in rural Mississippi.
- Built a prototype of a full-stack Learning Management System using React.js, Node.js, and SQL and presented to the board of directors

# Web Development Intern

Nov. 2022 - Aug. 2023

Financial Notices

Kathmandu, Nepal

- Launched SEO-optimized websites using HTML/CSS and JavaScript, improving traffic by 30%.
- Built and deployed responsive React components for high-speed rendering across devices.
- Refactored legacy frontend codebase, reducing bugs by 40%.

### **Projects**

### Druglytics (Hacklytics 2025) | Python, Streamlit, AWS, Cloudfare, Flask

- Analyzed 300K+ drug interactions using NLP and LLMs to warn users of allergic conflicts.
- Deployed video summaries using Google Gemini and OpenAI for personalized medical insights.
- Implemented secure backend with MongoDB and Cloudflare, deployed on AWS EC2.

# Swiped-In (HackNYU 2025) | Next.js, Node.js, MongoDB, Google Gemini

- Built AI-powered hiring app matching job seekers with recruiters via swiping interface.
- Integrated Gemini for AI interviews and ElevenLabs for voice-based screening.
- Launched end-to-end MVP within 18 hours using Tailwind and MongoDB.

# **Brot AI** | React.js, Node.js, MongoDB, Express.js

- Created full-stack chatbot with user authentication, chat history, and AI response system.
- Connected Gemini API for conversation and Clerk for authentication.

## Airbnb Instant Booking Prediction (eCornell) | Python, Jupyter Notebook, Numpy, Scikit-learn

- Built a logistic regression model to predict whether an Airbnb listing is instant bookable, using 28k+ NYC listings with extensive data preprocessing and feature engineering.
- Evaluated performance with accuracy, precision, recall, and F1-score, and improved results through hyperparameter tuning and handling class imbalance.

### Leadership

### University of Southern Mississippi

May 2025 - Present

Senior Resident Assistant

Hattiesburg, MS

- Led a team of 12 RAs and 10 Desk Assistants to support 400+ residents.
- Promoted from Desk Assistant (2023) to Resident Assistant (2024) to Senior Resident Assistant