






# Chaitanya Bansal

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## EDUCATION

<b>Kalinga Institute of Industrial Technology (KIIT),</b> BTech - Electronics & Computer Science Engineering CGPA-7.35	2022 – 2026   Bhubaneswar
<b>St.Francis School, Indirapuram, Ghaziabad,</b> Senior Secondary School Class XII - 79%	2022   Delhi NCR
<b>St.Francis School, Indirapuram, Ghaziabad,</b> Secondary School Class X - 90%	2020   Delhi NCR

## SKILLS

Python, Java, HTML, CSS, JavaScript, ReactJs, NodeJs, MySQL, C programming, Machine Learning, Deep Learning, Computer Vision, DSA, OOP, Figma, DBMS, OS, Probability & Statistics

## PROJECTS

<b>Bell's Palsy Severity Detection</b>	Nov 2024 – present
<ul style="list-style-type: none"><li>Engineered a ResNet50-based CNN to classify Bell's Palsy severity into 4 levels, achieving <b>98.79% accuracy, F1: 0.99 (mouth), 97.50% accuracy, F1: 0.98 (eyes), and 94.18% accuracy, F1: 0.92 (eyebrows)</b>.</li><li>Fine-tuned the last 20 layers of ResNet50 with transfer learning, optimizing training using Adam, cross-entropy loss, early stopping, and learning rate scheduling.</li><li>Augmented <b>1,000+ images</b> (from 14,000+) with rotation, zoom, flip, and shear to improve generalization and address class imbalance.</li><li>Evaluated model performance using confusion matrices, precision, recall, F1-score, and ROC-AUC; Optimizing for <b>real-time deployment</b> on mobile/web platforms.</li></ul>	
<b>Stock Price LSTM Forecasting</b>	Apr 2025
<ul style="list-style-type: none"><li>Engineered a 3-layer LSTM model (128-64-32 units) with dropout, batch normalization, and L2 regularization (0.001); achieved <b><math>R^2 = 0.96</math>, RMSE = 66.5, and MAE = 31.06</b>.</li><li>Trained on 5,000+ data points using EarlyStopping and learning rate scheduling, reducing validation loss by <b>70%</b> and doubling convergence speed.</li><li>Designed a time series pipeline with a 30-day lookback and MinMax scaling, improving model stability and reducing prediction variance by <b>15%</b>.</li><li>Visualized outputs with Matplotlib to track trends, enabling a <b>10% decrease</b> in forecast deviation and improved interpretability.</li></ul>	
<b>Web Text Scraping/Analysis</b>	Jun 2024
<ul style="list-style-type: none"><li>Developed a Python script to scrape and analyze content from 100+ web pages using <b>BeautifulSoup, NLTK, and requests</b>.</li><li>Extracted <b>250,000+ words</b>, calculating 15+ text metrics such as Fog Index, sentiment polarity, and subjectivity scores.</li><li>Achieved <b>95%+ accuracy in text extraction</b>, processing each page in under 3 seconds and exporting results to clean <b>Excel/CSV</b> formats.</li></ul>	

## COURSES

<b>Web Development Bootcamp- Udemy</b> HTML, CSS, Javascript, Node, React, PostgreSQL, Web3 and DApps.	<b>Data Science Bootcamp-Udemy</b> Math, Statistics, Python, Advanced Statistics in Python, Machine and Deep Learning.
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## EXPERIENCE

<b>Khwaab-KIIT, R&amp;D Team Member</b>	Nov 2023 – present   Bhubaneswar
<ul style="list-style-type: none"><li>Collaborated with a 40-member R&amp;D team at Khwaab, a student-led non-profit at KIIT University, to drive research-based social impact initiatives.</li><li>Spearheaded multiple on-campus events, increasing student participation in Khwaab-KIIT social initiatives by 20%, attracting 100+ attendees, and boosting volunteer sign-ups by 20% within the university community.</li></ul>	
<b>National Informatics Centre(NIC) Government of India,</b> Data Science Intern	May 2024 – Jul 2024   Delhi
<ul style="list-style-type: none"><li>Spearheaded the development of a digital platform aimed to empower India's 140M+ senior citizens (11% of the population, projected to exceed 20% by 2040), focusing on service accessibility and community engagement.</li><li>Analyzed 20+ key user and service data points to drive insights that improved platform design and usability for the elderly.</li><li>Acquired practical knowledge of data governance, user-centric design, and cross-functional collaboration to create inclusive digital solutions for elderly users.</li></ul>	

## EXTRA CURRICULARS

- Competed in the athletics relay sprint (100mx4) team and won multiple matches in a campus cricket tournament, demonstrating leadership, teamwork, and competitive spirit.
- Prototyped visual branding and logos for a self-startup concept during high school, demonstrating creativity and design skills.
- Coordinated logistics and operations for Kritarth, an annual sociocultural gala at KIIT with 1000+ registrations, and contributed to organizing Chimera, a cross-disciplinary event bringing together innovators from medical and non-medical fields.