

Startup Connect, AI-Driven Platform for Empowering Entrepreneurs

Adarsh P¹, Shyma Kareem²

¹Department of Computer Applications, Musaliar College of Engineering & Technology, Pathanamthitta, Kerala, India
Email: [adarshchandu333\[at\]gmail.com](mailto:adarshchandu333[at]gmail.com)

²Professor, Department of Computer Applications, Musaliar College of Engineering & Technology, Pathanamthitta, Kerala, India

Abstract: *Startup Connect is an AI-powered platform crafted to support and inspire emerging entrepreneurs by providing a collaborative environment for idea sharing, mentorship, and investor engagement. The platform incorporates essential features such as one-on-one chat for personal communication, a dynamic freelancer marketplace to connect with skilled professionals, and a gamified voting system that highlights the "Best Idea of the Day" to encourage community participation. Leveraging Feedforward Neural Networks (FNN) and other intelligent algorithms, Startup Connect enhances user interaction by analyzing content, providing relevant feedback, and supporting idea refinement. The platform not only streamlines the journey from concept to pitch but also fosters a vibrant, inclusive ecosystem that bridges the gap between innovation and opportunity. Through this intelligent and collaborative infrastructure, Startup Connect empowers users to turn their entrepreneurial visions into reality.*

Keywords: AI-driven platform, Startup ecosystem, Entrepreneur support, startup success prediction, FNN, GPT-based analysis, startup mentorship, entrepreneur-investor matchmaking, freelancer marketplace, idea collaboration, voting system, Startup community

1. Introduction

Startup Connect is an intelligent, AI-driven digital platform specifically designed to strengthen the startup ecosystem by bringing together aspiring entrepreneurs, experienced mentors, potential investors, and skilled freelancers into a unified and interactive environment. The platform acts as a catalyst for innovation, encouraging structured idea sharing, real-time communication, and streamlined access to expert guidance and freelance services. Through its integrated virtual meeting capabilities, Startup Connect enables entrepreneurs to pitch their ideas to investors from anywhere in the world, thus breaking geographical barriers and improving pitching efficiency. To enhance strategic decision-making, Startup Connect leverages advanced AI models such as Feedforward Neural Networks (FNN) and Generative Pre-trained Transformers (GPT) to generate comprehensive, personalized analytical reports. These reports provide deep insights into idea performance, user engagement, and projected growth. By analyzing user behavior, idea structure, and market alignment, the system calculates a unique success score for each submitted idea, helping users gauge its potential and readiness for mentorship or investment. This AI-driven approach ensures that every entrepreneur receives actionable, data-backed feedback tailored to their individual goals and startup vision. A key gamified feature of the platform is the "Best Idea of the Day", which is determined through a community-driven voting system. This not only boosts visibility for standout ideas but also fosters healthy competition, engagement, and peer recognition within the community. Moreover, the integrated freelancer marketplace allows startups to connect with professionals for specific project needs. By blending intelligent automation with human expertise, Startup Connect creates a comprehensive ecosystem where innovative ideas can evolve into successful ventures. Its seamless networking capabilities, combined with expert mentorship and AI-assisted insights, make it a

powerful tool for transforming raw concepts into scalable startups.

2. Literature Survey

Raisch, S., & Fomina, K. (2024) explore how artificial intelligence is reshaping strategic decision-making processes in entrepreneurial and investment contexts. Their study reveals that AI provides significant advantages such as real-time data processing, enhanced market analysis, and more accurate risk forecasting, which collectively improve the quality and objectivity of decisions. These capabilities help entrepreneurs and investors move beyond instinct-based strategies toward evidence-driven approaches. However, the authors also caution against excessive dependence on AI tools, especially when using complex or opaque algorithms that may overlook human values or contextual nuances. This over-reliance could lead to unintended consequences, particularly in high-stakes or ambiguous environments where human intuition remains critical.^[1]

Fomina, K., & Raisch, S. (2024) delve deeper into the collaborative dynamics between human decision-makers and AI systems in entrepreneurial ventures. They argue that the synergy between AI's computational power and human creativity yields optimal outcomes when decision-making responsibilities are clearly shared. The paper identifies AI's role in enabling scenario modeling, opportunity discovery, and behavioral pattern recognition. However, it also warns of potential friction when AI-generated recommendations conflict with human values, experience, or ethical judgments. If roles are not clearly delineated, the collaboration may become disjointed, leading to inefficiencies, mistrust, or fragmented decisions within startups or investor teams.^[2]

Obschonka, M. et al. (2024) investigate the psychological and behavioral implications of AI use in entrepreneurship. The research demonstrates that AI can serve as a productivity

enhancer, freeing up cognitive resources and allowing entrepreneurs to focus on creativity and innovation. It also facilitates faster decision cycles and adaptability in volatile markets. However, the authors point out that these benefits are accompanied by psychological downsides such as fear of obsolescence, reduced autonomy, and digital fatigue. They argue that when human roles are diminished in favor of automation, there can be a loss of emotional investment, team cohesion, and personal satisfaction, which may ultimately undermine startup culture and long-term sustainability.^[3]

Verhulst, C., & Bartolacci, M. (2024) address the ethical challenges involved in integrating AI into entrepreneurial decision-making. They emphasize the importance of building transparent and explainable AI systems that uphold fairness, accountability, and inclusivity—especially when guiding startup strategies and investment decisions. Ethical AI, according to the authors, fosters trust among users and can enhance the legitimacy of AI-led initiatives. However, implementing such safeguards often requires significant resources and technical expertise, which many startups lack. Moreover, the paper highlights a lack of universally accepted ethical frameworks, making it difficult for entrepreneurs to navigate the fine line between innovation and responsibility.^[4]

Kumar, S., & Sinha, A. (2024) present a novel AI-powered Startup Success Forecasting Framework (SSFF) that evaluates the potential of early-stage ventures. Their model combines historical data, performance metrics, and market trends to assign predictive scores that assist investors in identifying high-potential startups. This tool helps reduce human bias and standardizes the evaluation process, enabling quicker and more confident investment decisions. However, the framework may unintentionally penalize disruptive or unconventional business models that do not conform to historical patterns, thus limiting its usefulness in identifying truly groundbreaking ventures that defy norms.^[5]

Kusumastuti, R. D., Ghezzi, A., & Cavallo, A. (2024) examine the role of mentorship outside traditional incubator and accelerator programs. Their findings suggest that informal, decentralized mentorship can significantly accelerate startup development by providing tailored advice, psychological support, and access to industry networks. This approach allows for greater flexibility and cost-efficiency, especially for founders in resource-constrained environments. However, the lack of standardized structures or consistent performance tracking in informal mentorship may lead to uneven outcomes. Startups may receive conflicting guidance or fail to fully capitalize on mentor insights due to mismatched goals or communication styles.^[6]

Fossen, F. M. (2024) offers a broad overview of AI's transformative influence on the entrepreneurial ecosystem. The study identifies key areas such as opportunity recognition, product innovation, market segmentation, and investor interaction where AI has significantly lowered barriers to entry. AI-powered platforms enable leaner operations, better targeting, and more informed decisions, fostering the rise of data-driven entrepreneurship. On the downside, the research raises critical issues such as unequal access to AI tools, privacy concerns, and the erosion of human-centered creativity. These disparities risk creating a

digital divide where only tech-savvy or well-funded startups thrive.^[7]

Brooks, A. W., & Brooks, N. (2022) evaluate the growing popularity of digital mentorship platforms that connect experienced professionals with emerging entrepreneurs across geographic boundaries. Their study shows that online mentoring can be as effective as traditional in-person guidance, particularly when platforms incorporate features like progress tracking, feedback loops, and mentor matching algorithms. The accessibility and cost-effectiveness of these platforms make them attractive alternatives to formal incubators. Nonetheless, the authors point out that without structured processes and accountability mechanisms, virtual mentorship can become inconsistent, leading to confusion or stagnation in strategic planning.^[8]

Anderson, D., & Pei, M. (2022) assess the evolving landscape of freelance marketplaces and their role in supporting startup growth. These platforms provide startups with flexible, on-demand access to a global talent pool, thereby reducing operational costs and enabling faster project execution. Freelancers benefit from location-independent income and diverse work opportunities. However, the study also highlights concerns such as job insecurity, algorithm-driven competition, and downward price pressures that can negatively impact freelancer morale and output quality. For startups, managing remote freelance teams can introduce communication challenges and inconsistencies in deliverables.^[9]

Gandini, A. (2022) investigates the self-branding strategies adopted by freelancers to gain visibility and competitive advantage on digital work platforms. The study shows that personal branding—through curated portfolios, client reviews, and online persona—is key to securing high-value projects and building long-term client relationships. This branding creates a perceived trust and expertise that platform algorithms often reward. However, the pressure to constantly manage one's digital reputation can be emotionally taxing and may distract freelancers from skill development or creative focus. It also risks promoting style over substance in talent assessment.^[10]

Roundy, P. T. (2022) explores how algorithmic decision-making affects the functioning of entrepreneurial ecosystems. The research suggests that AI tools can streamline key processes like investment selection, mentor matching, and policy design, leading to more efficient and inclusive ecosystems. Algorithms can uncover hidden patterns and optimize resource allocation. However, the paper warns of the dangers of algorithmic opacity and bias, which may exclude unconventional or underrepresented startups. It advocates for participatory design of AI systems to ensure fairness, transparency, and alignment with diverse stakeholder needs.^[11]

Puranam, P. (2021) reframes human-AI collaboration not as a technological challenge, but as a problem of organizational design. The study emphasizes that success lies in carefully assigning roles, designing workflows, and managing interdependencies between human and machine agents. When these elements are thoughtfully structured, organizations can

harness the best of both worlds—machine precision and human judgment. Conversely, vague boundaries or misaligned incentives can lead to conflict, inefficiencies, and decision paralysis. The paper suggests that building mutual trust and clearly defining the scope of AI authority are critical for sustained collaboration.^[12]

Kumar, S., Umale, A., & Ganjewar, P. (2020) analyze how startups can leverage AI for operational efficiency, customer engagement, and strategic decision-making. The research outlines practical applications such as chatbot-driven support, predictive sales forecasting, and automated marketing campaigns. While these technologies enhance agility and scalability, the authors caution that resource-limited startups may struggle with adoption due to high setup costs, lack of training, or insufficient data. This creates a risk of technological inequality, where only well-capitalized startups benefit fully from AI innovations.^[13]

Xu, S. et al. (2019) propose a hybrid recommendation model that uses AI and network diffusion to match startups with relevant investors based on shared interests, sector focus, and historical collaboration patterns. The system significantly improves the accuracy and relevance of funding matches, helping startups avoid cold pitching and increasing their chances of securing investment. However, the effectiveness of the model relies heavily on access to comprehensive and accurate historical data. Startups new to the ecosystem or operating in emerging sectors may find themselves overlooked due to limited digital footprints.^[14]

Becker, K., & Gassmann, O. (2017) highlight the importance of structured mentorship in nurturing startup ecosystems. Their research shows that well-designed mentorship programs contribute to knowledge transfer, skill development, and increased investor readiness. When aligned with strategic goals, mentorship can accelerate product-market fit and improve founder confidence. Nonetheless, the paper warns that poorly matched mentor-mentee relationships or inconsistent engagement can dilute the benefits of such programs. Standardized metrics and regular evaluations are necessary to ensure effectiveness and sustainability.^[15]

3. Methodology

To develop Startup Connect, an AI-powered platform that connects entrepreneurs, mentors, and investors, a structured and systematic approach is adopted. The development follows a phased methodology, ensuring efficiency, scalability, and an intuitive user experience.

a) Requirement Gathering and Analysis

The development process begins with extensive requirement gathering and analysis. This phase involves identifying core functionalities, including user registration, AI-based idea analysis, chat, meetings, and portfolio management. Discussions with stakeholders help in refining the system requirements, ensuring that all user expectations are met. Functional and non-functional requirements, such as security, performance, and AI integration, are clearly defined. To ensure a smooth development workflow, system workflows and data flow diagrams are outlined, providing a clear

understanding of how different modules will interact within the application.

b) Design

In the design phase, a well-structured system architecture is developed to support the application's functionalities. The system follows a client-server model, with Flutter used for the frontend and Firebase for backend services. AI-driven features, including TensorFlow Lite (TFLite) for predicting a startup's success rate and a GPT-based model for automated report generation, are integrated to enhance the platform's intelligence. Database design is a crucial part of this phase, utilizing Firebase Firestore for real-time data management. Structured data models are created for user roles, startup ideas, portfolios, and chat messages to ensure seamless interactions. Additionally, a user-friendly interface is designed with wireframes and prototypes to provide a seamless experience. A well-organized dashboard for customers, mentors, investors, and admins is created, ensuring intuitive navigation and accessibility.

c) Development

The development phase involves building both the frontend and backend components of the platform. The frontend is developed using Flutter and Dart, ensuring cross-platform compatibility across Android, iOS, and Web. A modular approach is followed, implementing essential components such as login, portfolio creation, idea analysis, chat, and meetings. The backend is powered by Firebase, with Firebase Authentication handling user registration and login securely. Real-time chat functionality is implemented using Firebase Firestore, allowing smooth communication between customers, mentors, investors, and admins. A key highlight of the development phase is the integration of AI/ML models. The TFLite model is trained and deployed to predict the success rate of startup ideas, while a GPT-based AI system generates automated reports based on user inputs. Other crucial functionalities, such as idea submission and approval, portfolio management, a voting system to determine the best startup idea of the day, and an image upload system using Pinata Cloud, are implemented to enhance user engagement and collaboration.

d) Testing

Testing is an essential phase to ensure the platform operates smoothly and efficiently. A combination of unit testing, integration testing, and user acceptance testing (UAT) is performed to validate each component. Unit testing is conducted to check the correctness of individual modules, while integration testing verifies the seamless interaction between different components, including Firebase, AI models, and the chat system. User acceptance testing is carried out with selected users to identify usability issues and gather feedback for improvements. Performance testing is conducted to optimize the application's speed, database queries, and UI responsiveness, ensuring smooth user interactions. Additionally, security testing is implemented to safeguard user data by enforcing encryption protocols, secure authentication, and role-based access control mechanisms.

e) Deployment

Once the development and testing phases are completed, the application is prepared for deployment. The backend services

and AI models are hosted on cloud platforms, ensuring efficient and secure performance. The Flutter application is deployed on Google Play Store, Apple App Store, and as a Progressive Web App (PWA) to maximize accessibility across different devices. A robust monitoring system is put in place, integrating analytics and crash reporting tools to track application performance and detect issues in real time. Post-deployment, continuous feedback is collected to ensure a seamless user experience and prompt resolution of any unexpected issues.

f) Maintenance and Updates

After deployment, continuous maintenance is essential to ensure the smooth operation of the platform. Regular bug fixes and security updates are implemented to enhance the platform's stability and protect user data. Based on user feedback, new features and improvements are rolled out periodically to enhance the user experience. The AI models are continuously refined and retrained to improve accuracy and provide more relevant insights. Additionally, ongoing support is provided through community engagement and a helpdesk system to assist users with any issues they may encounter. This phase ensures that Startup Connect remains a robust, secure, and user-friendly platform, continuously evolving to meet the needs of entrepreneurs, mentors, and investors.

3.1 Algorithm used in Startup Connect

The algorithms used in Startup Connect are mainly two. They are:

3.1.1 Feedforward Neural Network (FNN)

A Feedforward Neural Network (FNN) is a fundamental and widely used architecture in the field of artificial intelligence. It operates by transmitting information in a forward direction from the input layer, through one or more hidden layers, and finally to the output layer without forming any cycles or feedback loops. This straightforward structure makes FNNs relatively simple to implement while still being highly effective for various prediction and classification tasks. In the context of Startup Connect, the FNN model is utilized to evaluate and predict the potential success of startup ideas. By analyzing multiple input features such as market demand, innovation level, team experience, and business scalability, the network generates a success score that reflects the likelihood of a startup's viability. This predictive capability helps entrepreneurs refine their ideas and provides valuable insights for mentors and investors within the platform.

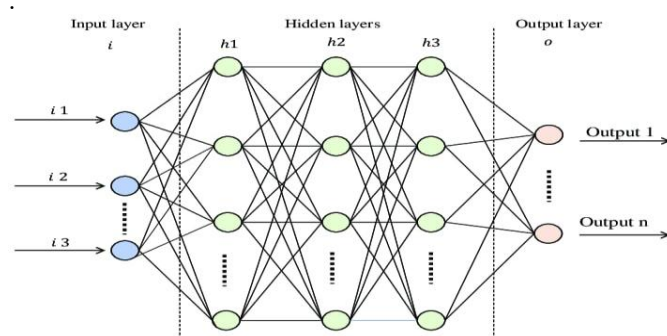


Figure 1: Architecture of FNN

Figure 1 shows the architecture of FNN. The FNN works like:

a) Input Layer

The input layer processes n startup-related features, including Industry Type (encoded as numerical or embeddings), Funding Stage (Pre-seed, Seed, Series A, etc.), Revenue, User Growth Rate, Team Size, Social Media Engagement, and Market Demand Score. Before feeding into the network, the data is preprocessed and normalized to ensure effective learning, preventing scale imbalances from affecting model performance.

b) Hidden Layers (Feature Learning)

The model consists of three hidden layers, each transforming the input data to capture complex, non-linear patterns crucial for predicting startup success. The first hidden layer has 64 neurons with ReLU activation, detecting high-level patterns in the input data. The second hidden layer refines the extracted features with 32 neurons and ReLU activation, improving pattern recognition. The third hidden layer, with 16 neurons and ReLU activation, further enhances the model's understanding by identifying deeper trends. Each neuron computes its output using the formula:

$$Z = W \cdot X + b$$

where W is the weight matrix, X is the input from the previous layer, and b is the bias term. Applying ReLU activation ensures non-linearity, calculated as:

$$A = \max(0, Z)$$

c) Output Layer (Prediction of Success Score)

The final output layer consists of a single neuron responsible for predicting the Startup Success Score on a 0-100 scale. Since this is a regression problem, a linear activation function is used to produce a continuous numerical output. The final predicted score is computed as:

$$Y_{\text{predicted}} = W_{\text{out}} \cdot A_{\text{lasthiddenlayer}} + b_{\text{out}}$$

d) Loss Function and Optimization

To measure the accuracy of predictions, the model uses the Mean Squared Error (MSE) loss function, calculated as:

$$MSE = \frac{1}{n} \sum (y_{\text{actual}} - y_{\text{predicted}})^2$$

A lower MSE indicates better performance by minimizing prediction errors. To optimize weight updates efficiently, the Adam (Adaptive Moment Estimation) optimizer is used, ensuring fast convergence and improved learning stability.

3.1.2 Generative Pre-Trained Transformer (GPT)

The GPT algorithm for Startup Connect is designed to provide AI-driven insights for entrepreneurs, investors, and mentors. It analyzes startup ideas, offers strategic recommendations, and predicts market potential using advanced text generation techniques. By leveraging prompt engineering and fine-tuning on startup-specific data, it delivers tailored feedback to help users refine their business models, attract investors, and improve overall feasibility. This AI-powered system ensures that every startup gets expert-level guidance, making innovation and growth more accessible.

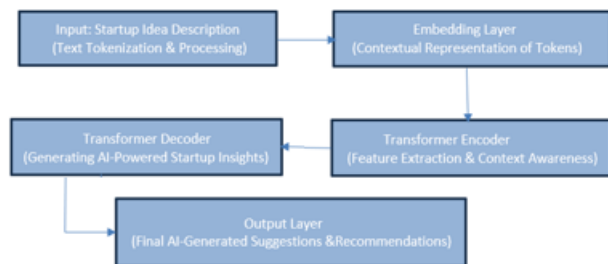


Figure 2: Architecture of GPT

Figure 2 shows the architecture of GPT. The working of GPT:

a) Input Layer (Text Tokenization and Processing)

The first stage of the architecture involves processing raw startup-related text input. This includes descriptions of startup ideas, business models, funding stages, and market niches. The input is preprocessed through tokenization, sentence segmentation, punctuation handling, and stopword removal to ensure efficiency. Additionally, categorical data, such as funding stages and industry type, are converted into numerical representations. This structured input ensures the model can effectively interpret and analyze startup-related content.

b) Embedding Layer (Contextual Representation of Tokens)

Once the input is tokenized, it is passed through an embedding layer, which converts individual tokens into dense numerical representations. These embeddings capture the semantic meaning of words and phrases, allowing the model to understand relationships between different elements of a startup idea. Pre-trained embeddings such as BERT, GPT, or FastText can be fine-tuned with startup-related data to enhance accuracy. Additionally, positional encoding is applied to retain sequence awareness, ensuring that the order of words in startup descriptions is properly considered.

c) Transformer Encoder

The Transformer Encoder plays a crucial role in understanding the contextual relationships between different parts of a startup description. It utilizes a multi-head self-attention mechanism to identify dependencies, such as how a startup's market demand affects its funding potential. The encoder includes layer normalization and residual connections to stabilize training and prevent gradient vanishing. Additionally, a feedforward neural network (FNN) further processes the extracted features, refining insights for investor recommendations, mentor matching, and risk assessment.

d) Transformer Decoder

The Transformer Decoder is responsible for generating structured and meaningful responses based on the startup input. A masked multi-head attention mechanism ensures that predictions are made word-by-word while maintaining context coherence. Residual connections and layer normalization help in preserving consistency in generated outputs. The feedforward neural network (FNN) computes probability distributions over possible words, allowing the model to generate insightful suggestions such as startup validation, market fit analysis, and funding strategies.

e) Output Layer

The final output layer of the architecture generates probability distributions over words to produce structured, human-like

responses. These responses include personalized funding strategy recommendations, investor matchmaking, and startup validation reports. The AI also suggests ways to optimize business models, reduce risks, and improve scalability. Through this approach, Startup Connect ensures that entrepreneurs, investors, and mentors receive accurate, AI-driven insights to foster growth and collaboration in the startup ecosystem.

3.2 Dataset Description

For Startup Connect, which focuses on analyzing startup ideas, generating analytical reports, and providing improvement suggestions using Natural Language Processing (NLP) and Deep Learning techniques, selecting the right datasets is crucial for training and validating machine learning models (such as BERT, GPT, or T5). These datasets should contain labeled information on startup descriptions, industries, funding stages, investor preferences, user feedback, and market trends to ensure accurate analysis and recommendation generation. Below is a potential dataset that could be highly beneficial:

a) Crunchbase Dataset

The Crunchbase dataset is a valuable resource for Startup Connect, offering a comprehensive collection of startup-related information, including company profiles, funding rounds, industries, and key personnel. Regularly updated, it covers a diverse range of industries and geographic locations, making it ideal for AI-driven analysis. Key attributes such as company name, description, industry classification, funding details, investor participation, key personnel, and company status provide deep insights into startup growth and success patterns. The dataset enables Startup Connect to analyze trends, predict startup success rates, and offer data-driven recommendations to entrepreneurs, mentors, and investors. By leveraging this dataset, Startup Connect can enhance its AI-powered analytical reports, facilitate meaningful investor connections, and provide users with real-time insights into the evolving startup ecosystem.

4. Result & Discussion

The implementation of *Startup Connect* marks a significant advancement in fostering startup growth through a unified, AI-driven platform. This section presents a comprehensive evaluation of the platform's performance, user engagement, and functional impact compared to existing solutions. The results highlight how features such as AI-based idea analysis, role-based access, real-time communication, and integrated collaboration tools have enhanced user experience and platform efficiency. Additionally, the discussion explores user feedback, platform scalability, and comparative advantages over conventional platforms. The insights derived from this evaluation provide a clear understanding of the platform's effectiveness in addressing core challenges faced by early-stage entrepreneurs.

a) System Performance and Functionality

The Startup Connect platform is designed to deliver a seamless and intuitive user experience, featuring a responsive interface developed using Flutter to ensure smooth performance across mobile devices. Its modular architecture enables the platform to scale efficiently, supporting an

expanding user base that includes startups, mentors, investors, and freelancers without compromising performance. By incorporating advanced AI models such as Feedforward Neural Networks (FNN) and Generative Pre-trained Transformers (GPT), the system generates insightful analytical reports for evaluating submitted startup ideas. Additionally, the platform prioritizes security through role-based access control, encrypted data storage, and secure authentication methods, thereby maintaining high standards of data privacy and user protection.

b) Test Cases and Outcomes

The system was evaluated through a set of well-defined test cases to ensure proper functionality. Users are able to successfully register by providing valid details, and upon login, they are presented with features that correspond to their designated roles. When a startup idea is submitted, it undergoes AI-driven analysis, resulting in a generated analytical report. These ideas become publicly visible, fostering engagement and collaboration. The voting mechanism functions correctly, ensuring accurate vote counts and displaying the daily winner. Instant messaging capabilities are supported, enabling smooth real-time communication. The platform also includes a freelancer hiring feature, where clients can view freelancer profiles and submit service requests. Users have the ability to modify and update their profile information as needed. To protect sensitive areas, access is restricted unless a user is authenticated. Furthermore, the system demonstrates reliable performance, remaining fully operational even when handling more than 100 simultaneous users.

c) Comparative Analysis with Existing Systems

Startup Connect distinguishes itself from existing platforms through its advanced features and comprehensive approach. By utilizing Feedforward Neural Networks (FNN) and GPT models, the platform delivers intelligent and efficient analytics for evaluating startup ideas surpassing other platforms that either lack AI integration or offer limited functionality. It also ensures user data security through role-based access control, allowing customized access for entrepreneurs, mentors, investors, and freelancers something rarely implemented elsewhere. Startup Connect supports real-time communication through instant chat features, boosting user engagement and responsiveness compared to platforms with minimal or no communication tools. Additionally, the platform is specifically designed for startup needs, incorporating features such as idea voting, mentor-investor matchmaking, and project tracking capabilities not fully covered by the existing platforms. Its affordable or free usage model further reduces financial barriers for new entrepreneurs, avoiding the high costs typical of alternative services. Moreover, Startup Connect unifies collaboration, mentorship, investment, and freelance hiring into a single streamlined solution, addressing multiple startup needs within one integrated ecosystem.

d) Model Evaluation Result

To assess the potential success of startups, a regression model utilizing a neural network was developed in the Startup Connect platform. The model was trained to predict a startup's success score using key attributes such as the country of operation, industry sector, and founding year. The

performance of this predictive model was evaluated using the Mean Absolute Error (MAE), which quantifies the average deviation between the predicted and actual success scores. The model achieved a test MAE of 4.25 within a success score range of 0 to 100. This corresponds to an estimated prediction accuracy of approximately 95.75%, calculated using the formula:

$$\text{Accuracy} = 100 - (\text{MAE} / \text{Score Range} \times 100)$$

These results indicate that the model demonstrates strong predictive capability in estimating startup success. To further illustrate the model's performance, a pie chart was employed to provide a visual summary of the prediction results. The chart clearly depicts the model's accuracy at 95.75%, while highlighting an average prediction error of only 4.25%. This visual representation effectively reinforces the numerical findings, offering an intuitive understanding of the model's reliability and minimal deviation in predicting startup success scores. Such clarity in presentation supports informed decision-making for users of the Startup Connect platform.

Estimated Prediction Accuracy of Success Score

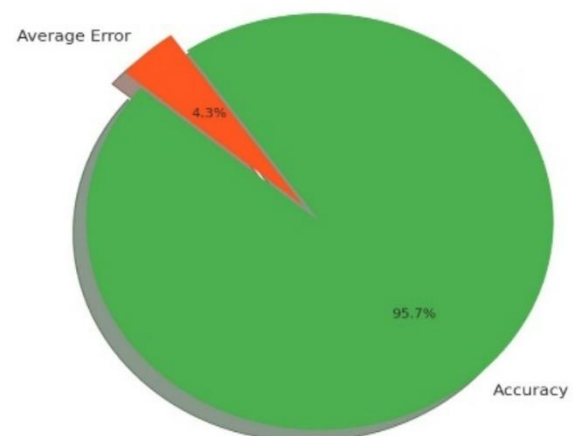


Figure 3: Accuracy

5. Conclusion

In conclusion, the development of Startup Connect marks a significant advancement in providing a dedicated and intelligent platform for entrepreneurs, mentors, investors, and freelancers to collaborate, network, and grow together. By integrating AI-driven analytical report, real-time chat, structured mentorship programs, and a freelancer marketplace, the platform addresses the key challenges faced by existing systems, such as high subscription fees, inefficient networking, and lack of structured guidance. The user-friendly interface and secure role-based access control ensure data privacy and seamless interactions, making Startup Connect an inclusive and accessible solution for all stakeholders. The platform not only fosters startup growth and innovation but also contributes to a thriving entrepreneurial ecosystem by simplifying the process of finding the right mentors, investors, and collaborators. The successful implementation of Startup Connect is expected to revolutionize the way startups connect, seek funding, and grow their ventures, ultimately making entrepreneurship more accessible and efficient.

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