Technical Skills:

* **Programming Languages:**
  + [Python](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Python&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIEhAB&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**:** The dominant language in AI due to its extensive libraries like [TensorFlow](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=TensorFlow&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIQxAB&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank), [PyTorch](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=PyTorch&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIQxAC&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank), and [scikit-learn](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=scikit-learn&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIQxAD&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank).
  + [Java](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Java&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIFRAB&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**,**[C++](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=C++&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIFRAC&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**, and R:** Useful for specific applications and performance-sensitive tasks.
* [Machine Learning](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Machine+Learning&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQITRAC&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**(ML):**
  + **Algorithms:** Understanding concepts like decision trees, SVMs, and neural networks.
  + **Frameworks:** Proficiency in tools like TensorFlow, PyTorch, scikit-learn, or Keras.
* [Deep Learning](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Deep+Learning&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQILhAC&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**:**
  + **Neural Networks:** Knowledge of CNNs, RNNs, and other architectures.
* **Data Handling and Analysis:**
  + **Data Preprocessing:** Cleaning, transforming, and preparing data for models.
  + **Visualization:** Creating insightful visualizations with tools like Matplotlib and Seaborn.
* [Natural Language Processing](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Natural+Language+Processing&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIOhAC&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**(NLP):**
  + **Understanding language:** Techniques for text analysis, sentiment analysis, and more.
* **Math and Statistics:**
  + **Linear Algebra, Calculus, and Probability:** Essential for understanding the foundations of AI algorithms.
* **Big Data Technologies:**
  + [Apache Spark](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Apache+Spark&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIExAB&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**,**[Hadoop](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Hadoop&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIExAC&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**:** Handling large datasets efficiently.
* **AI Security:** Understanding security concerns and best practices in AI systems.
* **AI Deployment and DevOps:** Bringing AI models into production environments.

Non-Technical Skills:

* [Problem-Solving](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Problem-Solving&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIYxAB&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**:** Identifying and resolving complex issues in AI development.
* [Communication and Collaboration](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Communication+and+Collaboration&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIZxAB&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**:** Effectively communicating technical information and collaborating with teams.
* [Adaptability and Continuous Learning](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Adaptability+and+Continuous+Learning&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIZRAB&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**:** The field is constantly evolving, so staying up-to-date is crucial.
* [Ethical and Social Awareness](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Ethical+and+Social+Awareness&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIZBAB&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**:** Understanding the ethical implications of AI and its impact on society.

Advanced Skills (Optional):

* [Generative AI](https://www.google.com/search?cs=0&sca_esv=54ace114b6b48ae5&sxsrf=AE3TifMmSelWYb45mrH0Sng_31-CKohhlg:1753959587516&q=Generative+AI&sa=X&ved=2ahUKEwjLvtzQ-OaOAxWmR2wGHRq7CX4QxccNegQIehAB&mstk=AUtExfChKqTIHJD5_LKKEX6XLiUyuhFljtNO16eYHJP9IOaD38YI8OxjKzPC7iWRlXxHW8ZYhMMmFIgmzFWLyNFe9CRwsxbmy52Lns12ptcRNcTt5oY70Zo3863SRNQE7L_3vwFFSzYi8ggwGM9DHi7aWB2y1tuIti7FaM2BjDRa8JToYbI&csui=3" \t "https://www.google.com/_blank)**Models and Reinforcement Learning:** For more advanced AI applications.
* **Advanced Mathematics and Algorithm Knowledge:** For specialized roles.

By focusing on these technical and non-technical skills, you can build a strong foundation to become a successful AI Engineer.