



# MICHAEL SMITH

## FULL STACK DEVELOPER | AI & ML ENGINEER

Walnut, California, US | [michaelsmith1995711@gmail.com](mailto:michaelsmith1995711@gmail.com)

### EXPERIENCED AI EXPERT

- Results-driven Full Stack and AI/ML Engineer with 9+ years of experience in delivering SOTA machine learning and deep learning solutions. Expert in deploying advanced AI technologies like OpenAI GPT and Llama, specializing in large language models, chatbot development, and NLP applications. Proven ability in data science and engineering, adept with tools like Apache Spark and Tableau for data integration and visualization.
- Proficient in multiple programming languages, including Python and Java, and experienced in Full-Stack development using Node, Laravel, Spring Boot and Django for Backend and React, JavaScript and TypeScript for Frontend. Skilled in cloud platforms AWS and GCP, and deploying robust solutions with Docker and Kubernetes. Excel in building innovative recommendation systems and performing sentiment analysis, leveraging both SQL and NoSQL databases.
- Passionate about driving technology innovation and delivering impactful, scalable solutions. Recognized for strong problem-solving skills and strategic technology application to enhance performance and user experience.

## AREAS OF EXPERTISE

- Machine Learning & Deep Learning
- Data Science & Engineering
- Programming & Development
- Cloud Computing & Deployment
- Big Data Technologies
- Database Management
- Business Intelligence & Visualization
- Innovative Problem-Solving

## PROFESSIONAL EXPERIENCE

DEC 2023 -  
PRESENT

### Senior AI Engineer & Data Architect *Talkhealth AI*

Healthcare technology company leveraging AI-driven insights to provide personalized medical information, empowering individuals to make informed health decisions and fostering a healthier future through the integration of technology and medical expertise.

- Led the creation and deployment of an advanced healthcare chatbot that delivers real-time health analysis and personalized healthcare recommendations using ChatGPT API and Pinecone for natural language processing and information retrieval.
- Designed a dynamic data pipeline to update medical information from Merck Manuals and CVS product inventories, utilizing MongoDB, AWS DynamoDB, and Elasticache to ensure efficient data management and accessibility.

NOV 2020 -  
OCT 2023

- Architected a secure, scalable infrastructure using AWS services like S3 and CloudWatch, and deployed applications using Docker, facilitating seamless integration with Next.js for frontend services.
- Implemented robust data handling processes to ensure full compliance with HIPAA regulations, safeguarding user privacy and data security.
- Developed automation solutions with Zapier and HubSpot, leading to a 50% reduction in manual processes and significantly enhancing operational efficiency in data management and customer engagement.
- Guided cross-functional teams to align product features with technical capabilities, fostering innovation and operational efficiency, while mentoring junior engineers in machine learning and data engineering best practices.

## AI/ML ENGINEER

### BRIDGE VIEW

Technology consulting and talent firm specializing in building exceptional tech teams and delivering complex projects through strategic consulting and a vast network of niche professionals.

- Created and deployed a customer churn prediction model using PyTorch and TensorFlow for a major e-commerce client, increasing retention rates by 30% and contributing to a \$2 million annual revenue boost through targeted marketing.
- Engineered and integrated a real-time fraud detection model with AWS SageMaker and AWS Lambda for financial institutions, reducing false positives by 20% and saving clients approximately \$500,000 annually in fraud prevention.
- Developed an NLP-driven chatbot for customer support using NLTK and SpaCy, which enhanced user interaction by reducing response times by 60% and increasing customer satisfaction ratings by 25%.
- Implemented advanced language capabilities in chatbots and virtual assistants using Google Dialogflow and GPT models, streamlining customer service interactions and maintaining high engagement levels across client platforms.
- Architected a recommendation engine using collaborative filtering for a streaming service, achieving a 35% increase in user engagement and a 10% rise in subscription renewals within the first quarter of deployment.
- Built and maintained a data warehousing framework with Apache Spark and Amazon Redshift for a large retail client, improving data retrieval and accelerating business intelligence reporting times by 70%.
- Integrated Langchain in NLP tasks for automated content generation and semantic understanding, significantly boosting the efficiency and accuracy of content management systems used by clients.

SEP 2017 -  
OCT 2020

## FULL STACK DEVELOPER

### TRADEPLANS AI

An innovative platform that leverages artificial intelligence (AI) to assist traders in making informed decisions and optimizing their trading strategies.

- Hired, trained and lead Agile team of 6 full stack developers
- Simultaneously created & maintained scheduled jobs in SQL Server for space maintenance and daily backups of system and user databases for 10 clients
- Increased company revenue by 30% within 2 months after developing and implementing business logic for over 20 features
- Designed and Developed UI design for over 15 clients using CSS, HTML, ASP.NET, Vue.js and React.js; websites scoring over 85 on Lighthouse

FEB 2016 -  
AUG 2017

## SOFTWARE DEVELOPER

### WAWMA

Japanese data analytics company that offers market insights and pricing trends for online auctions and e-commerce platforms, helping users make informed buying and selling decisions.

- Shortened project timeline by 18 months for company's largest customer by managing relationship with 3<sup>rd</sup> party vendors, saving over \$800K
- Built highly responsive, mobile-first web applications for security management, ensuring smooth access and real-time monitoring on both desktop and mobile devices, improving usability for security personnel in the field
- Integrated secure authentication and role-based access control (RBAC) into the React application, ensuring only authorized users can access and control video feeds, aligning with security protocols
- Optimized the performance of the React application by using lazy loading, code splitting, and memorization techniques, resulting in faster load times and better user experience across devices

## EDUCATION

DEC 2015

### MASTER'S DEGREE IN DATA SCIENCE

The University of Wyoming

AUG 2013

### BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Nagoya University

## SKILLS

Machine Learning | Deep Learning | Natural Language Processing | Sentiment Analysis | Text Processing | LLM | Chatbot Development | Data Analysis | Data Integration & Pipelining | ETL/ELT Processing | Data Visualization | Automation | Python | R | Java | Scala | Golang | Ruby | JavaScript | Node.js | FastAPI | Flask | Django | Spring Boot | PyTorch | Tensorflow | Keras | GPT | Claude | Llama | Langchain | LiteLLM | Pinecone | ChromaDB | AWS SageMaker | AWS Bedrock | Apache Spark & PySpark | Apache Hadoop & Hive & HBase | AWS | GCP | MySQL | PostgreSQL | MongoDB | Amazon S3 | Redis | Snowflake | Elasticache | DynamoDB | SerpAPI | GoogleAPI | Twilio | HubSpot | Zapier | Dialogflow | MS Office | Rasa Platform | IBM Watson | Apache Airflow | Tableau | Data Studio | PowerBI | Full Stack

## LANGUAGE

- ENGLISH(NATIVE)
- CHINESE(FLUENT)
- JAPANESE(FLUENT)