ARJUN SUBEDI

Buena Park, CA · arjunsubedideveloper@outlook.com · (562) 522-1505 · arjunsubedi.net

EDUCATION

California State University, Fullerton   Fullerton, CA
B.S. Computer Science

SKILLS

PROGRAMMING LANGUAGES: Python, SQL, C#, Java, C++, JavaScript, Visual Basic:
DATA ANALYSIS: Statistical Analysis, SharePoint Analytics, Data Mining, ETL Processes, Data Cleansing, AB Testing:
VISUALIZATION TOOLS: Tableau, Power BI, Excel (Advanced), Matplotlib, Seaborn, Google Data Studio:
FRAMEWORKS & LIBRARIES: TensorFlow, Django, React, Spring Boot, ASP.NET Core, Node.js, Express.js, Pandas:
DATABASES: SQL Server, PostgreSQL, MySQL, Oracle, MongoDB, FireBase:
CLOUD & INFRASTRUCTURE: AWS (EC2, S3), Azure, Docker, Kubernetes:
MACHINE LEARNING/AI: Neural Networks, Deep Learning, Supervised/Unsupervised Learning, Feature Engineering:

WORK EXPERIENCE

Sandia National Laboratories   Livermore, CA
Machine Learning Intern   June 2024 - Present

- Architected sophisticated, distributed data processing pipelines on Linux high-performance computing clusters, implementing parallel processing with Python for real-time analysis of terabyte-scale multi-omics datasets

- Engineered high-performance machine learning models (Random Forest, XGBoost, CNN, LSTM, Transformer networks) for biological data analysis, enabling accurate prediction of patient outcomes with 85% accuracy

- Designed and implemented SQL Server and PostgreSQL database schemas to store and efficiently query large-scale biological research data

- Created comprehensive data visualizations using Tableau, Power BI, and Excel to communicate complex research findings to stakeholders

- Developed ETL workflows with Alteryx and SSIS to transform raw biological data into structured formats for analysis

- Built automated reporting systems using SQL, Python (Pandas), and R to generate regular performance metrics for research teams

Kaiser Permanente   Pasadena, CA
Data Analytics and Automation Intern   January 2024 - May 2024

- Developed and optimized complex ETL workflows using Python, SQL, and Alteryx, resulting in a 30% improvement in data integration efficiency and accuracy

- Created interactive healthcare dashboards by extracting and transforming data via PostgreSQL and visualizing with Tableau, enabling data-driven decision making for clinical staff.

- Standardized and processed sensitive patient records from Kaiser Permanente's proprietary Clarity database, ensuring data integrity while maintaining HIPAA compliance.

- Designed automated workflows that reduced manual processing time by 40%, significantly improving operational scalability and minimizing human error.

- Contributed to an in-house web application using React and D3.js that visualized complex data workflows through interactive Sankey diagrams, allowing analysts to identify processing bottlenecks and optimize departmental resource allocation across the data collection pipeline.

- Implemented SharePoint solutions for healthcare data documentation and cross-team information sharing, improving departmental collaboration

Crescent Software, Inc.   Signal Hill, CA
Software Developer Intern   May 2023 - December 2023

- Refined client applications through strategic debugging and feature enhancement using Visual Basic, resulting in measurable improvements in user experience and customer satisfaction.

- Engineered custom Sage 100 ERP modules for specialized industries including warehouse management and food distribution, leveraging Visual Basic and SQL to meet complex business requirements.

- Modernized legacy software systems through careful refactoring and feature integration, preserving critical business logic while implementing modern UI/UX improvements for diverse client bases.
- Optimized database performance through advanced SQL query optimization techniques, resulting in 25% faster transaction processing and improved system reliability.

PROJECTS

SecureChat *Node.js, Express, Websockets, React, bcrypt, Python*
Designed and implemented a real-time encrypted messaging platform using WebSocket protocol for instant communication with end-to-end encryption. Engineered robust security features including public/private key encryption, secure authentication with bcrypt password hashing, and account lockout protection. Developed user profile management system with online status tracking, typing indicators, and read receipts for enhanced user experience. Implemented secure file sharing capabilities with client-side encryption and comprehensive message history tracking. Built scalable backend architecture with Express and WebSocket Server (ws), incorporating robust error handling and detailed security logging.

HealthWise *React Native, Django, TensorFlow, FireBase, AWS, Python, Git*
Architected and deployed a comprehensive iOS health platform integrating symptom analysis with personalized fitness and nutrition coaching. Implemented machine learning models for predictive health analytics and personalized recommendation engines. Designed HIPAA-compliant data architecture using Firebase and AWS services, with secure OAuth2 authentication protocols. Built responsive, intuitive user interfaces with React Native, emphasizing accessibility and seamless user experience.

Amazon Price Tracker *Python, BeautifulSoup, Requests, SMTP, Git*
Engineered an automated price monitoring solution for Amazon products with customizable price thresholds and alert systems. Implemented efficient web scraping algorithms using BeautifulSoup to extract and process product data at scale. Developed reliable HTTP request management for continuous price monitoring without triggering security measures. Created a streamlined email notification system using SMTP to deliver timely price alerts to users.

AWARDS

CSUF College of Engineering and Computer Science Scholarship - October 2024

Ford Philanthropist Scholarship - February 2025