

ZAVEN AVAGYAN

Yerevan, Armenia

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SKILLS

1. **Programming Languages**
- **Python**: Advanced level 4 years of experience
- **C++, Java, R, JavaScript**: Beginner level

2. **Mathematics and Statistics**
- Linear Algebra, Calculus, Probability, and Statistics
- Optimization Techniques: SGD, convex optimization and more

3. **Data Handling and Processing**
- **Data Manipulation**: Pandas, NumPy
- **Data Visualization**: Matplotlib, Seaborn, Tableau
- **Database Management**: SQL, PostgreSQL, NoSQL (MongoDB)
- **Big Data**: Apache Spark, Hadoop
- **Text Extractors**: PDFplumber, Pytesseract

4. **Machine Learning Frameworks and Libraries**
- TensorFlow, PyTorch, Scikit-learn, Keras, XGBoost, LightGBM

5. **Deep Learning Techniques**
- Neural Networks: CNNs, RNNs, LSTMs
- **NLP**: Tokenization, Word Embeddings (Word2Vec, BERT)
- **Computer Vision**: Image Processing, Object Detection

6. **Model Evaluation and Validation**
- Cross-validation, Metrics (accuracy, precision, recall, F1-score, ROC-AUC)
- Hyperparameter Tuning: Grid search, random search

7. **Software Engineering Skills**
- Git/GitHub, REST APIs, Docker, Kubernetes, Model Deployment (AWS, GCP, Azure, Flask/Django)

8. **Cloud Computing**
- AWS, Google Cloud, Azure,

SUMMARY

Machine Learning Engineer with expertise in developing and deploying advanced models for real-world applications, including object detection, image classification, and natural language processing. Proficient in Python, TensorFlow, PyTorch, and cloud computing platforms such as AWS and GCP. Strong foundation in mathematics, statistics, and data handling, with experience in optimizing machine learning models for high accuracy and performance. Seeking to leverage my skills in machine learning to explore emerging fields and drive innovation in AI technologies.

PROJECTS

Telegram Bot for Medical Data Analysis
Key Technologies: Python, PostgreSQL, PyTorch, Rest API, NLP, Text Extractors

- Developed and deployed a Telegram bot for processing medical documents (PDF, PNG, JPEG), enabling data extraction and question answering. Implemented OCR for text extraction and a custom NLP pipeline for analysis and user interaction. Integrated a GPT-based model achieving 97% accuracy for medical query responses. Designed a PostgreSQL database to store files and extracted text, reducing redundant processing and improving system performance.

Github: ZavenAvagyan

WORK EXPERIENCE

Jan 2026 - Present
Co-Founder & CTO, Ancanot

- As CTO of Ancanot, I lead the technical vision and development of our social communication platform, focusing on communities, voice calls, and meaningful interaction. I oversee the technology strategy, system architecture, product development, and engineering direction, building scalable and reliable solutions that enable more natural and intentional human communication.

May 2025 - May 2026
Senior ML Engineer, SellStorm Group

- As a Senior ML Engineer, I lead end-to-end development and deployment of ML systems, designing scalable pipelines and ensuring production-grade performance. I also develop and teach an AI course covering theory and practical applications. In addition, I serve as IT team lead, overseeing

HuggingFace
- Distributed Computing: Multi-GPU/CPU training

9. Automated Machine Learning (AutoML)
- Tools: Google AutoML, H2O.ai, DataRobot

10. Security and Ethics
- Data Security, Ethical AI

11. Signal Processing
- Time series data, Fourier transforms, wavelets

technical projects, conducting architecture and code reviews, and mentoring teams to deliver scalable and secure solutions.

May 2022 - December 2024
ML Engineer, VGG Systems

- Developed and optimized deep learning models for computer vision and NLP applications, including object detection and image classification systems using CNNs, YOLO, and transfer learning (ResNet), achieving 93% accuracy on sidewalk hazard detection with limited data. Applied techniques such as data augmentation, learning rate scheduling, and early stopping to improve model performance. Also fine-tuned a LLM for an Armenian chatbot, integrating local linguistic nuances to enhance contextual understanding and response quality.

EDUCATION

Present
Yerevan, Armenia
American University of Armenia – BS in CS

03/03/2026
Yerevan, Armenia
Machine Learning Academic Program at Business Development Group

01/2020
Yerevan, Armenia
“Shirakatsy Lyceum” International Educational Complex - High School

LANGUAGES

Armenian: First Language

English: C2
Proficient

Russian: C2
Proficient

ACCOMPLISHMENTS AND AWARDS

- Datathon 2023 Winner
- Aspire Leaders Program 2025
- CaseKey Academy Completion Certificate
- CaseKey 2024 Finalist
  (Credential ID 81d1477fd40849efadea4fa0bf134c6c)

https://certopus.com/c/81d1477fd40849efadea4fa0bf134c6c