# **Roman Vasilyev**

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#### **EDUCATION**

University of Davis | Davis, California

## **Bachelor of Statistical Computation, Minor in Computer Science**

May 2026

Degrees: A.S in Mathematics, A.S in Science & Mathematics

Relevant Coursework: Data Structures, Algorithms and Analysis, Differential Equations, Linear Algebra, Discrete

Structures for Computer Science

#### RELEVANT EXPERIENCE

### California Air Resources Board | Sacramento, CA

September 2023 - Present

Information Technology Specialist

- -Utilized advanced Excel formulas to produce monthly data reports, resulting in a cost reduction of 15%.
- -Designed a government infrastructure website using HTML and Drupal, improving accessibility compliance by 15%.
- Developed a flowchart-based data integration in **Power BI**, reducing info retrieval by **30%**.

Infis.ai | Davis, CA January 2025 - Present

Python Software Engineer Intern

- -Developed a full **Python-based NLP** pipeline using **Pandas**, **NLTK**, and **Regex** to extract and transform natural language content into quantitative features for ML model training.
- Designed and implemented a **MongoDB-based data storage system** managing over **10,000 supplier records**, improving query efficiency and reducing data retrieval time by **60%**.
- -Optimized a risk assessment algorithm by integrating geopolitical, crime, and government data, improving predictive accuracy using **Python**, **Pandas**, and **scikit-learn**.

## **GIGChampion** | Davis,CA

January 2025 - Present

IT/Data Engineer

- -Designed and maintained **Python-based ETL pipelines** using **Pandas** to automate ingestion, cleaning, and transformation of structured data from third-party **RESTful APIs**, reducing manual processing time by over **40%**.
- -Built data syncing workflows and KPI's using Power BI and Matplotlib, supporting real-time decision-making.

#### TECHNICAL PROJECTS

#### Secure Data Encryptor (Python/Pandas/Scikit) | Personal Project

January 2024 - August 2024

- -Built a **Python-based** data protection tool utilizing **AES encryption** to secure passwords and **full CSV datasets**.
- -Implemented batch encryption processing over 10,000 records/minute, and ensuring data confidentiality.

AI Brute Force Password Hacker (Python/Tensorflow/Keras Api) | Personal Project December 2024- Feb 2025

- -Designed and trained an LSTM-based neural network to analyze common password patterns and simulate brute-force attack methodologies, aimed at evaluating system password strength.
- -Engineered a data preprocessing pipeline to structure large-scale leaked password datasets for ethical security testing and machine learning model training.

SQL Injection Detection & Logging Predictor (Python/Pandas/SQLite) | Personal Project January 2025- March 2025

- -Created an AI-driven Flask dashboard utilizing TensorFlow LSTM to detect SQL injection attacks with 95% accuracy.
- -Used **Pandas** for data preprocessing, cleaning, and transformation to prepare datasets for **TensorFlow** model training.

#### **SKILLS & CERTIFICATIONS**

- Programming Languages: C++, Python, HTML,
- Tools and Technologies: MongoDB, Azure Ai, Excel, Word, Power BI, TensorFlow, API's, Pandas, SciKit, Flask
- Certifications: Google Cybersecurity Certificate, Microsoft Azure AI, Fundamentals of Cybersecurity