Dennis Koshta

denniskoshta@gmail.com ❖ (925) 297-7647 ❖ Santa Cruz, CA

WEBSITE: www.denniskoshta.com   **LINKEDIN:** www.linkedin.com/in/denniskoshta

EDUCATION

University of California, Santa Cruz **June, 2025**

Bachelor of Science, Major in Computer Science, Minor in Statistics *Santa Cruz, CA*
- 4.0 GPA, Dean's Honors in 5/5 quarters
- Machine Learning and Data Team Lead at NeuroTechSC

WORK EXPERIENCE

Independent Tutor/Instructor **January 2020 – Present**

Tutor for computer science, math, piano, science, and Russian history
- Tutored 8 fellow college students in computer science, explaining and assisting with debugging C and C++ code, as well as teaching common Git and Linux practices. Average of 5 hours of lessons per week in total.
- Created personalized one on one lesson plans, helping three students raise their grade from failing to an A.
- Previously tutored children of various ages in math, piano, biology, as well as Russian history, culture, and literature; led activities and lessons for groups of up to 20 students.

Verana Health **July 2019 – August 2019**

Machine Learning Research Intern *San Francisco, CA*
- Worked with data from multiple clinical databases, mainly the IRIS Registry, to develop ML models for embedding representations of physician and patient data.
- Used Jupyter Notebooks and TensorFlow to train deep neural networks for classification and analysis of those embeddings, performed benchmarks and analysis of different models using the matplotlib package.
  - Achieved over 90% model accuracy in predicting a physician's specialty based on patient data.
- Gave weekly reports/presentations of progress to project manager, attended weekly stand-up meetings.

Machine Learning Consultant **December 2018 – September 2020**

Freelance ML Consultant on the Fiverr platform
- Consulted 7 clients on various machine learning topics and applications; offered general advice, discussed specific ideas and possible solutions, and created models for requested tasks.
- Designed neural networks to perform tasks such as image classification, text generation, and function approximation, then performed analysis with real world data, delivered Jupyter/Colab notebooks.

SKILLS

- **Programming Languages:** Python (TensorFlow, PyTorch, Flask), C/C++, HTML/JS/CSS, SQL, Haskell
- **Software/Technologies:** Git, Jupyter/Colab, linux, REST APIs, multithreading, gcloud, Excel, vim, Photoshop, Blender
- **Languages:** English, Russian, French

PROJECTS

Portfolio Website - www.denniskoshta.com:
- Developed a personal portfolio website using Flask, a lightweight Python web framework, and integrated a RESTful API for seamless communication between the frontend and backend of the website.
- Hosted the website on Google Cloud Platform's App Engine, providing a scalable and reliable hosting solution with a custom domain and SSL security. Tracked code development/documentation with a Github repo.
- Projects: hand motion tracking (JS), actor degrees of separation (C++), JavaScript drawing canvas (JS), Monkey's Paw Wish Generator (Python), and a multi-threaded HTTP server (C).

Subvocal Speech Recognition with sEMG Signals:
- Attempted to detect subvocal phonemes from surface Electromyography (sEMG) data using a Temporal Multi-Channel Vision Transformer (TMC-ViT).
- Explored the application of subvocal phoneme detection in silent communication devices and assistive technologies for individuals with speech impairments.
- Utilized a novel deep learning architecture that leverages the benefits of vision transformers and temporal multi-channel features to achieve improved performance on sEMG data.
- Presented research poster with NeurotechSC Club members at California Neurotechnology Conference 2023.