NITISH NAGESH

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EDUCATION

Ph.D. Computer Science, University of California Irvine; **GPA**:3.81/4.0 December 2024 (expected)

- **Relevant Coursework:** *Machine Learning, Causal Inference, Natural Language Processing, Information Retrieval, Algorithms and Data Structures*
- **Awards:** *Graduate Venture Fellowship ($5,000), ACM SIGMM Student Travel Grant ($2,000), Mental Health Hackathon Award ($3,500), Graduate Student Fellowship ($2,500)*

M.S. Computer Engineering, University of California San Diego; **GPA**: 3.70/4.0 February 2021

B.E. Electrical Engineering, Visvesvaraya Technological University, India; **GPA**: 3.65/4.0 July 2016

- **Awards:** *Best Outgoing Student, Silver Medal for Academic Excellence, Most Innovative Thesis Award*

SKILLS: Python, R, TensorFlow, C, C++, Matlab, SQL, Tableau.

RELEVANT EXPERIENCE

University of California Irvine, Irvine, CA September 2021 - Present

Research Assistant

- Build personalized food recommendation systems using 3.5+ years food, nutrition, sleep, physical activity dataset.
- Develop open-source food and well-being database for users to navigate their health journey.
- Design novel data collection schema on top of Google's schema in collaboration with dietitians and physicians from Stanford University to standardize food-related dataset collection.
- Develop personalized AI-driven applications to improve peoples mood through timely dietary interventions.
- **Publications:**
  - **Nitish Nagesh,** Iman Azimi et al. **"Towards Building Deep Personal Lifestyle Models using Multimodal N-of-1 Data."** 29th International Conference on Multimedia Modeling, 9-12 January 2023, Bergen, Norway.
  - Ali Rostami, **Nitish Nagesh**, et al. **"World Food Atlas for Food Navigation."** 7th International Workshop on Multimedia Assisted Dietary Management, 30th ACM International Conference in Multimedia, 10 October 2022.

Qualcomm, Austin, TX March 2021 - August 2021

Corporate Research and Development Engineer

- Developed Python tool to parse data from 5000+ logs of the Qualcomm AI accelerator saving 3x cycle time.
- Triaged and debugged failures in ML accelerators SDK via Python scripting to improve performance benchmarks.

RELEVANT PROJECTS

Natural Language Processing Implementation April 2022 - June 2022

- Classified presidential candidate speeches via supervised and semi-supervised learning in Python and TensorFlow.
- Built and compared n-gram language models to analyze in-domain and out-of-domain perplexities.
- Evaluated summarization models by using top-K sampling, nucleus sampling, beam search decoding algorithms.

Web Crawler and Search Engine Builder January 2022 - March 2022

- Crawled 50,000 URLs from ics.uci.edu domain using Python to find page similarity and subdomains.
- Built search engine using Flask, HTML, CSS to query and retrieve top twenty matches from crawled databases.

Reinforcement Learning and Machine Learning Algorithm Design September 2021 - December 2021

- Programmed reinforcement learning agent using Monte Carlo Tree Search in Python to solve Sokoban puzzle.
- Designed and implemented machine learning algorithms using kNN, Naïve Bayes classifiers, linear regression, cross-validation, logistic regression, shattering, nearest neighbor, decision trees, neural networks, and clustering.

MNIST Classification using CNN September 2021 - December 2021

- Classified fashion-MNIST dataset running convolutional neural networks (CNN) on Google Colab using Python.
- Achieved 95.88% training accuracy and 93% test accuracy after hyperparameter tuning and cross-validation.