Nick DiSanto

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Education

California Baptist University Aug. 2019 – Apr. 2023
B.S. in Computer Science, *summa cum laude*
GPA: 4.0/4.0. Ranked #1 in graduating class.

Experience

CalBaptist ML & NLP Lab Jan. 2022 – Present
Lead Undergraduate Researcher

- Investigates representation learning to find abstract patterns in unstructured social media data, challenging the necessity of complex algorithms for natural language pattern recognition
- Proposes a novel method of data preprocessing that allows medical imaging models to better perceive their environments and democratizes accessibility for underrepresented communities
- Produced analyses and applications for three papers, leading the team from inception to execution

Sirch Sep. 2023 – Present
NLP Consultant

- Builds models that perform Query Auto-Completion (QAC), information retrieval, and NLU
- Scales product to efficiently handle increasing foot traffic while maintaining a personalized UI

General Electric June 2022 – Aug. 2023
Software Engineering Intern

- Led the development, implementation, and deployment of an automated database cleanup initiative that saves the organization thousands of dollars per year
- Developed and optimized microservices for large-scale data ingestion and analytic applications

Keysight Technologies June 2021 – Aug. 2021
Software Engineering Intern

- Created a web-based platform for process/document management and team collaboration. Built product customization applications to enable clients to tailor their specific purchases
- Used T-SQL to perform high-level data analysis, eliminating 40% of product-option configurations

Publications & Preprints

Transcending the Attention Paradigm: Representation Learning from Geospatial Social Media Data.
N DiSanto, B Sanders, G Harding, N Corso, A Corso. In Submission, 2023. [pdf] [code]

Spatial Analysis of Social Media's Proxies for Human Emotion and Cognition.
A Corso, **N DiSanto**, N Corso, G Harding, K Wang, B Sanders. In Submission, 2023. [code]

Leveraging Contextual Data Augmentation for Generalizable Melanoma Detection.
N DiSanto, G Harding, E Martinez, B Sanders. arXiv preprint arXiv:2212.05116, 2022. [pdf] [code]

Beyond Interpretable Benchmarks: Contextual Learning through Cognitive and Multimodal Perception.
N DiSanto. arXiv preprint arXiv:2304.00002, 2022. [pdf]

Teaching Experience

Intro to C++, *Teaching Assistant*	Spring 2023
Discrete Structures, *Teaching Assistant*	Fall 2022
Algorithms, *Tutor*	Spring 2022
Computer Architecture, *Tutor*	Spring 2022
Physics for Engineers II, *Teaching Assistant*	FA/SP 2021

Presentations

Twitter2030 – Empirical Social Media Analysis. [Co-presented]. Apr. 2023
CBU Undergraduate Thesis and Capstone Composition

Service

Secondary Reviewer

- *Decision Support Systems*, 2023
- *Mathematics*, 2022

Awards & Honors

CS Outstanding Student Award (ranked #1/40)	Apr. 2023
Inducted into Alpha Chi Honor Society (top 10%)	Apr. 2022
Physics Performance & Leadership Award	Dec. 2021
President's List (every semester of undergraduate study)	FA 2019 – SP 2023
Trustee Merit Scholarship	FA 2019 – SP 2023
Engineering Excellence Scholarship	SP 2021 - SP 2023

Leadership

Founder and President of CBU Chess Club.

Member of Association for Computing Machinery (ACM) Chapter.

Lead trumpet and section leader in 4 competitive musical ensembles.

Set up a newly opened high school's computer lab.

Performed data analysis of STAR test data for an elementary school in an underrepresented area.