# 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 approach to 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

*Spatial Analysis of Social Media's Proxies for Human Emotion and Cognition.*
A Corso, **N DiSanto**, N Corso, E Lee. *iConference 2024.* [code]

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

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

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

**Service**

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

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| **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 CBU's Association for Computing Machinery (ACM) Chapter.

Lead trumpet and section leader in 4 competitive CBU musical ensembles.

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

Performed STAR test data analysis for an elementary school in a low-income area.