

Nilay Patel

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EDUCATION

Ph.D in Computer Science	2022→
University of California, Santa Cruz	
GPA: n/a	
M.S. in Natural Language Processing	2020→2021
University of California, Santa Cruz	
GPA: 3.93/4	
B.S. in Computer Science & Applied Math	2016→2020
Florida State University	
GPA: 3.70/4 (Upper level: 3.91/4)	

SKILLS

Languages	<i>Python</i> , Haskell, SQL, C/C++, Javascript, Julia
Frameworks/Libraries	PyTorch, numpy/scipy, pandas, matplotlib/seaborn, sklearn
Tools	Docker, Git, standard Unix tooling, \LaTeX

RESEARCH

Forming Trees with Treeformers

Nilay Patel and Jeffrey Flanigan. Forming trees with treeformers. *arXiv preprint arXiv:2207.06960*, 2022

M.S. Capstone Project

Nilay Patel, Mamon Alsalihi, Austin King, and Sarangarajan Parthasarathy. University of California, Santa Cruz, Aug 2021

Undergraduate Honors Thesis

Nilay Patel. Recommendation algorithms for student evaluation data. 2019

WORK HISTORY

Software Engineer	September 2021 - July 2022
@ <i>Computational GeoInterpretation</i>	Tallahassee, FL
Designed and productionized state-of-the-art geophysical image segmentation AI.	

- Researched and implemented new methods for improving AI image segmentation performance
- Improved overall AI training and inference speed
- A complete (solo) redesign and rewrite of our data storage and loading software to improve speed, scalability, usability, and maintainability (halved total code).

Frontend Developer (Intern)	January 2018 - June 2018
@ <i>Diverse Computing Inc.</i>	Tallahassee, FL

Developed web applications for various law enforcement applications. Responsibilities included:

- Developing the front-end in AngularJS
- Writing comprehensive end-to-end test suites
- Designing efficient databases