

# Nilay Patel

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## EDUCATION

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

## SKILLS

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<b>Languages</b>	<i>Python</i> , Haskell, SQL, C/C++, Javascript, Julia
<b>Frameworks/Libraries</b>	PyTorch, numpy/scipy, pandas, matplotlib/seaborn, sklearn
<b>Tools</b>	Docker, Git, standard Unix tooling, L <sup>A</sup> T <sub>E</sub> X

## RESEARCH

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### Undergraduate Honors Thesis

Nilay Patel. Recommendation algorithms for student evaluation data. 2019

### M.S. Capstone Project

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

### Forming Trees with Treeformers

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

## WORK HISTORY

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<b>Frontend Developer (Intern)</b>	January 2018 - June 2018
@ Diverse Computing Inc.	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

<b>Software Engineer</b>	September 2021 - July 2022
@ Computational GeoInterpretation	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).