		Daniel Paul-Pena San Francisco Bay Area — December 2023	daniel-paul.github.io dpaulpen@ucsc.edu	
Research Interest	I S	Theoretical Computer Science, Subgraph Counting, Fine-grained complexity		
Educatio)N	University of California, Santa Cruz Ph.D. Candidate in Computer Science and Engineering Advisor: C. Seshadhri GPA:3.95/4.0	09/2021 – 06/2026 (Expected)	
		University of Southern California M.S. in Computer Science GPA: 3.91/4.0	08/2018-05/2020	
		University of Malaga M.S. in Software Engineering and Artificial Intelligence Advisor: Marlon Núñez	09/2016–07/2017	
		University of Malaga B.S. in Industrial Engineering	09/2012 - 08/2016	
Work Experience		Amazon, Science Applied Scientist Intern	06/2023 - 12/2023	
		Amazon, Kindle Software Developer Engineer	05/2020-06/2021	
		Amazon, Kindle Software Developer Engineer Intern	05/2019-08/2019	
		Acheron Capital Ltd. IT & Database Analyst	09/2017–05/2018	
Publications		Preprints		
Google Scholar	I.	A Dichotomy Hierarchy Characterizing Linear Time Subgraph Counting in Daniel Paul-Pena, C. Seshadhri In submission, 2023	<u>n Bounded Degeneracy Graphs</u>	
	2.	A Dichotomy Theorem for Linear Time Homomorphism Orbit Counting in Bounded Degeneracy Graphs Daniel Paul-Pena, C. Seshadhri In submission, 2022		
	3.	<u>A Formal Notion of Coverage for Explainable AI Methods</u> Daniel Paul-Pena, Leilani H. Gilpin, C. Seshadhri In submission, 2022		
		Journal Papers		
	4.	<u>Predicting >10 MeV SEP Events from Solar Flare and Radio Burst Data</u> Marlon Núñez, Daniel Paul-Pena <i>Universe</i> , 2020		

Awards	Regents Fellowship, UC Santa Cruz Department Fellowship, UC Santa Cruz Honors Certificate, University of Southern California, Fulbright Scholarship Honorable Mention, Spain National Physics Olympics	2021 2021 2020 2018 2012
Invited Talks	Poster: A Dichotomy Hierarchy Characterizing Linear Time Subgraph Counting. TOCA-SV Homomorphism Orbit Counting in Bounded Degeneracy Graphs. TOCA-SV	2023 2022
Service	Reviewer: STACS 2024 Volunteer: FOCS 2023	
Teaching Experience	Teaching Assistant for CSE 105/209A: Modern Algorithmic Toolbox, UC Santa Cruz Teaching Assistant for CSE 201: Analysis of Algorithms, UC Santa Cruz Teaching Assistant for CSCI 270: Introduction to Algorithms and Theory of Computing, University of Southern California	Spring 2023 Winter 2022 Spring 2020