

- Developed a debugging approach based on analysis of provenance data obtained during system executions equipped with correctness specifications. Our approaches require programs and their correctness properties written in a high-level declarative language.

- Helped Design a standalone prototype Debugger Nemo and validated Nemo on protocols from real-world distributed bugs. Our experimental result shows that Nemo demonstrates the promise of automatic provenance-guided debugging for complex distributed protocols.

PROJECTS	<p>Fault-tolerant Scalable Key-Value Store 2017</p> <ul style="list-style-type: none"> • Developed a distributed, fault-tolerant key-value store that can store the amount of data that cannot fit into one single machine, using consistent hashing. <p>Chess Puzzle Solver 2017</p> <ul style="list-style-type: none"> • Wrote a program that can determine if a player can force checkmate in up to 5 steps, including the moves of the opponent. <p>Online Reservation system 2017</p> <ul style="list-style-type: none"> • Designed an online reservation app for Manyue Yoga Stadium, on-line payment system, and on-line community for member to share their experience.
TEACHING EXPERIENCE	<ul style="list-style-type: none"> • CMPS101: Algorithms and Abstract Data Types, UCSC, Tutor Fall 2017 • CMPS12B: Introduction to Data Structures, UCSC, Lab Tutor Winter 2018 • CMPS12B: Introduction to Data Structures, UCSC, Tutor Spring 2018
OTHER EXPERIENCE	<ul style="list-style-type: none"> • CMPS101: Algorithms and Abstract Data Types, UCSC, Grader Fall 2017 • CMPE107: Probability and Statistics , UCSC, Grader Spring 2018
AWARDS	<ul style="list-style-type: none"> • Dean's Honor List: Fall 2016, Winter 2017, Spring 2017, Winter 2018, Spring 2018
SKILLS	<p>Programming: C, C++, Shell Scripting, Python, Java, Matlab, Bash</p> <p>Tools: Git, \LaTeX, Vim, Neo4j, Docker</p>
REFERENCES	<p>Dr. J.J. Garcia-Luna-Aceves University of California, Santa Cruz Distinguished Professor of Computer Science and Engineering Jack Baskin Endowed Chair of Computer Engineering Phone: 831-459-4153 E-mail: jj@soe.ucsc.edu</p> <p>Dr. Peter Alvaro University of California, Santa Cruz Assistant Professor of Computer Science and Engineering Phone: 415-813-9364 E-mail: palvaro@ucsc.edu</p>