Saketh Ram Kasibatla

Ph.D. Student at UC San Diego Computer Science & Engineering
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AREAS OF INTEREST

Human-Computer Interaction · Usable Programming · Human-AI Interaction
I'm interested in building the next generation of tools to help people make software using AI

EDUCATION

2023-Present — Doctor of Philosophy (4/4) — Computer Science & Engineering, UC San Diego
Advised by Sorin Lerner and Nadia Polikarpova

2016-2018 — Master of Science (4/4) — Computer Science, UC Los Angeles
Thesis: Seymour: A Live Programming Environment for the Classroom
Advised by Alessandro Warth and Todd Millstein

2012-2016 — Bachelor of Science (3.75/4) — Computer Science, UC Los Angeles

PUBLICATIONS

ICSE 2026 — Cobblestone: A Divide-and-Conquer Approach for Automating Formal Verification
SR Kasibatla, A Agarwal, Y Brun, S Lerner, T Ringer, E First

generates proofs for the Rocq interactive theorem prover using an LLM; isolates failing parts using a novel fault localization algorithm to isolate failing parts, recursively repairing these parts

VL/HCC 2025 — The Command Line GUIde: Graphical Interfaces from Man Pages via AI
Best Short Paper
SR Kasibatla, K Medleri Hiremath, R Rothkopf, S Lerner, H Xia

fully automatically generates GUIs for CLI applications using man pages and LLMs

NeurIPS 2024 — HYSYNTH: Context-Free LLM Approximation for Guiding Program Synthesis
S Barke, E Anaya Gonzalez, **SR Kasibatla**, T Berg-Kirkpatrick, N Polikarpova

combines LLM generations and bottom-up enumerative search to produce completions more quickly and correctly than an LLM or bottom-up synthesis alone

LIVE 2017 — Seymour: Live Programming for the Classroom
SR Kasibatla, A Warth

a live programming environment that helps students understand program semantics, featuring two novel visualizations of a program's execution trace

LIVE 2016 — Language hacking in a live programming environment
P Dubroy, **SR Kasibatla**, M Li, M Röder, and A Warth

a live workbench for prototyping parsers, which synthesizes examples of production rules from user-provided examples

CONFERENCES

VL/HCC 2025 · SPLASH 2024 · LIVE 2024 · ICSE 2024 · LIVE 2017 · LIVE 2016

EXPERIENCE

Jun 2025–Present **Sandia National Laboratories** · Graduate R&D Intern
- used LLMs to write finite state machines based on specification documents

Jan-Aug 2023 **US Service Animals** · Engineering Consultant
- assessed costs and benefits of various analytics tools
- designed and implemented a library to process analytics events for Amplitude
- built buy-in with engineering, business, and data stakeholders to create processes that maintain high quality for accurate business intelligence

2019-2022 **Vesica Technologies** · Founding Engineer
- architected a pipeline to process hundreds of gigabytes of financial data per day
- reduced product iteration time from weeks to days using notebooks and exporatory data analysis
- implemented a pure functional UI library for a more predictable, performant and testable frontend
- led the improvement of processes, tools, and architectures to make the engineering team more effective

2017-2018 **UCLA Computer Science** · Teaching Assistant
- led a discussion section for CS131: Programming Languages
- developed a new class project to teach students about asynchronous programming

2016-2017 **Y Combinator Research/HARC** · Researcher
- published Seymour and the Ohm Editor

2015-2016 **Communications Design Group** · Research Intern
- prototyped a block-based language for data visualization

Summer 2015 **Bloomberg LP** · Software Development Intern

Jan–Sep 2014 **At the Pool/Yeti** · Software Development Intern

Summer 2013 **Qualcomm** · Intern

REFERENCES

Sorin Lerner
Dean
CIS @ Cornell
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Nadia Polikarpova
Vice Chair
CSE @ UC San Diego
npolikarpova@ucsd.edu

Emily First
Assistant Professor
CS @ Rutgers
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