Saketh Ram Kasibatla

Ph.D. Student at UC San Diego Computer Science & Engineering San Diego, California · https://saketh.kasibat.la · saketh@kasibat.la

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 environme snt 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

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 LernerNadia PolikarpovaEmily FirstDeanVice ChairAssistant ProfessorCIS @ CornellCSE @ UC San DiegoCS @ Rutgerssorin.lerner@cornell.edunpolikarpova@ucsd.eduemily.first@rutgers.edu