

Ziteng (Zetten) Wang

CONTACT INFORMATION	Undergraduate student <i>University of California, San Diego</i>	e-mail: ziw329@eng.ucsd.edu website: https://wzt.me/
BRIEF	Zetten is a third-year undergraduate student in Computer Science and Mathematics, whose interests are focused on the area of Programming Systems, specifically PL Design and Compilers. He looks forward to seeing that the revolution in the field of PL eventually profits the software industry.	
EDUCATION	University of California, San Diego , B.Sc COMPUTER SCIENCE University of California, San Diego , B.Sc MATHEMATICS	Sep 2017 – Jun 2021 Sep 2017 – Jun 2021
RESEARCH EXPERIENCE	HOOGLE+ , University of California, San Diego <i>Undergraduate Researcher, advised by Prof. Nadia Polikarpova</i>	Jun 2019 – Present <ul style="list-style-type: none">• Implemented a test-based filtering framework to exclude synthesized result by HOOGLE+, a component-based program synthesizer for Haskell.• Utilized meta-programming and state-of-the-art Haskell test-frameworks to implement the filter.• Wrote proofs for formality proposed in the HOOGLE+ paper, including modeling of Petri net, reachability, and type-refinement lattice, etc.
	GATHEREXPERIMENT , University of California, San Diego <i>Research Assistant, advised by Prof. Timothy Rickard</i>	Jan 2018 – Jul 2018 <ul style="list-style-type: none">• Developed backend for an experiment application used in an interleaving psychology study.• Proposed structures of data management for experiments; planned the development timeline.• Wrote and reviewed team codes for JS with stacks <i>React/Redux/MongoDB</i> used.
PROJECTS	mistztt/vscode-elsa-lang <i>Syntax Highlighting in TextMate-style for λ-calculus</i>	Jan 2018
	mistztt/tmodloader-mod-localizer <i>Localization Utility based on .NET MSIL modification</i>	Mar 2018 <ul style="list-style-type: none">• Developed the utility that is specialized in software localization for fan-made game modification, written in C# with <i>Mono.Cecil</i> to read/write compiled assemblies in <i>CIL</i>.• The utility extracts and injects translated resources through bytecode emitting to assemblies.• Separated into independent modules to be extensible with possible game framework updates.• Encapsulated most features to be used out-of-the-box for people without any programming background.
HONORS AND AWARDS	Third Place, POPL 2020 Student Research Competition , New Orleans, LA	2020
TALKS	Test-based Solution Filtering for Program Synthesis, POPL 2020 SRC , New Orleans, LA	2020
PUBLICATIONS	<ol style="list-style-type: none">[1] Zheng Guo, Michael James, David Justo, Jiaxiao Zhou, Ziteng Wang, Ranjit Jhala, and Nadia Polikarpova. 2020. Program Synthesis by Type-Guided Abstraction Refinement. Proc. ACM Program. Lang. 4, POPL, Article 12 (January 2020), 28 pages. https://doi.org/10.1145/3371080[2] Ziteng Wang. 2020. Test-based Solution Filtering for Program Synthesis. Proc. ACM Program. Lang. 4, POPL, Student Research Competition, 3 pages.	