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# Zhe Zhou

[Homepage](#)  
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## EDUCATION

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<b>PhD of Computer Science</b> <i>Purdue University, Advised by Prof. Suresh Jagannathan</i> Main courses: Programming Languages, Reasoning about Programs, Compiling and Programming Systems Operating Systems, Pattern Recognition and Decision-Making Processes (GPA: 4.0)	<b>2018.8 – present</b>
<b>Bachelor of Computer Science</b> <i>Peking University, Advised by Prof. Guangyu Sun</i>	<b>2013.9 – 2017.7</b>

## WORK EXPERIENCE

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<b>Full Time C++ Software Engineer</b> <i>Megvii</i>	<b>2017.7 – 2018.7</b> <i>Beijing, China</i>
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## RESEARCH INTEREST

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*Formal verification, automated verification, type system, property-based testing, specification inference, program synthesis*

## SKILLS&LANGUAGES

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<b>Mostly used:</b>	Ocaml, Coq, Z3
<b>Familiar with:</b>	SML, C, C++, Java, Python, Scala, Haskell, Dafny

## PUBLICATION

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<b>Data-Driven Abductive Inference of Library Specifications</b> <i>Zhe Zhou, Robert Dickerson, Benjamin Delaware, and Suresh Jagannathan</i> (Distinguished Artifact)	<b>OOPSLA'21</b>
<b>Covering All the Bases: Type-based Verification of Test Input Generators</b> <i>Zhe Zhou, Ashish Mishra, Benjamin Delaware, and Suresh Jagannathan</i>	<b>PLDI'23</b>

## SERVICE

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<b>Artifact Evaluation Committee Member</b>	<b>PLDI'23</b>
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## PROJECT

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<b>Data-driven Specifications Inference</b> <i>Design a data-driven inference procedure which is guided by counterexamples to infer specifications of multiple the blackbox library APIs that are consistent with the given whitebox client code.</i>	<b>OOPSLA'21</b>
<b>Underapproximate Refinement Type System</b> <i>Design a refinement type system that verifies the coverage property of the random test generator.</i>	<b>PLDI'23, In progress</b>
<b>Machine learning for Program Synthesis</b> <i>Use the machine learning approaches (e.g., MCMC-based approach, transformer neural network) to learn expected programs.</i>	<b>In progress</b>