

Yi Zhen | Curriculum Vitae

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Experience

- Mar. 2021 – Present, Senior Software Engineer, [Ant Group](#), Shanghai, P.R.China
- Nov. 2018 – Mar. 2021, Software Engineer, [Huawei Research](#), Shanghai, P.R.China
- Apr. 2017 – Nov. 2018, Software Engineer, [Citigroup](#), Shanghai, P.R.China

Job Projects

Team Lead & Tech Architect

Ant Group

co-founder of [Smart IR](#); project manager of [Gödel](#); scrum master of [KCL](#)

Mar. 2021 – Present

Smart Intermediate Representation A brand-new asset-safe smart contract language compiler for WASM

Gödel Query Language Datalog-based query programming language. Part of [CodeFuse-Query](#)

KCL Language constraint-based language mainly used in cloud-native configuration and policy scenarios

Semi-Parsing System Persistent Robust(Fault Tolerance) Compiling System for C/C++/ObjC

Tech Lead

Huawei Research

Development and leading the architecture design

Nov. 2018 – Mar. 2021

DevEco Lowcode A lowcode [platform](#) for UI Design; SwiftUI-like plug-in for HarmonyOS DevEco Studio

HMS Toolkit IDE [plug-in](#) provides all the tools users need to develop their own HMS Core-integrated app

OpenArkCompiler Unified programming [platform](#) supporting multiple devices and languages

R&D Engineer

Citigroup

Development and Continuous Integration

Apr. 2017 – Nov. 2018

WIRE Wire transfer system of block trade agent to book transfer and income

EWARA Anti-Money Laundering risk control system of data collection and management, risk value analysis

HAMSTER Experimental machine learning project of bank statement understanding

Miscellaneous

Publications

- Z. Cao, **Y. Zhen**, G. Fan and S. Gao, "TokenPatronus: A Decentralized NFT Anti-theft Mechanism," arXiv:2208.05168 [cs.CR], Aug. 2022. (WIP)

Side Projects

ERC721G: Anti-Theft ERC721 Solution

author

web3 smart contract

Jun. 2022 – Oct. 2022

World's First Anti-Theft NFT Series and Solution: A universal technical solution to be adapted to any ERC721 standard smart contract to help NFT holders guard their property security jointly

Github Address <https://github.com/turtlecasedao/OpenERC721G>

OpenSea Address <https://opensea.io/collection/turtle-case-gang>

Project Lambda

founder

web2 app

Nov. 2016 – Jan. 2017

A Hacker-News-like social information platform focusing on IT industry and computer science, which users could publish general news, academic contents and questions through it

Keywords Haskell 8.0.2, Scotty, Persistent, mime-mail, websockets, Blaze, PostgreSQL, Bootstrap, jQuery

Github Address <https://github.com/ProLambda/Times>

Website Address <http://sweetpotato.ai>

PPrinter: A generic derivable Haskell pretty printer

author

Haskell Library - 3525 times download till 09/20/2022

Jun. 2016 – Aug. 2016

PPrinter is a Haskell library that supports automatic derivation of pretty printing functions on user defined arbitrary data types (the deriving mechanism supports the automatic generation of instances for functions)

Hackage Address <http://hackage.haskell.org/package/PPrinter-0.1.0>

Compiler of Small-C

developer

system software

Oct. 2015 – Dec. 2015

A compiler for the subset of C language that compiles the source code to Java bytecode. It contains the essential parts of a standard compiler including lexer, parser, semantic analyzer and code generator

Github Address <https://github.com/i-zhen/Reactor-C>

School Team

Sun Yat-sen University ASC Student Supercomputer Challenge Team

Team member

2014

- ASC14 required the team to wring the most HPC performance out of a 3000W power allowance
- Mastered the numerical methods, GPGPU heterogeneous computing and multiprocessor programming
- Optimized the SU² – a Stanford University developed open-source C++ code for PDE analysis and designed things that adhere to PDE constraints, and assisted in the HPL event

Professional Skills

Programming Language and Framework

Language: Rust, Solidity/Cairo, TypeScript, Haskell, C/C++, Java, Python, Scala, Prolog, Coq

Framework: Hardhat, web3.js/ether.js, clang/vscode-clangd, Spring, JMS, Mockito, JDBC, ASM

Awards

First Prize and Highest Linpack Award

The ASC Student Supercomputer Challenge (ASC14)

2014

Set a new world record of HPL(Linpack) performance and won 10,000 CNY

Bronze Medal

The ACM-ICPC China Guangdong Provincial Programming Contest (GDCPC)

2014

Two-time recipient of First Prize

The National Olympiad in Informatics in Provinces (NOIP)

2009&2008

Education

University of Edinburgh

Edinburgh, U.K.

Master of Science in Artificial Intelligence

Sep. 2015 – Nov. 2016

Dissertation: Deriving Pretty-printing for Haskell, supervised by Prof. Philip Wadler

Sun Yat-sen University

Guangzhou, P.R.China

Bachelor of Engineering in Software Engineering

Sep. 2011 – Jun. 2015

Recommended for admission to SYSU and exempted from Gaokao because of well performance at NOIP