

Christophe Gyurgyik

PHD STUDENT · COMPUTER SCIENCE

Stanford University

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Education

Stanford University

Stanford, CA

PHD STUDENT

2023 - present

- Advisor: Professor Fredrik Kjolstad

Cornell University

Ithaca, NY

BACHELOR'S DEGREE

2018 - 2021

- Minor in Science & Technology Studies
- Research advisor(s): Professor Adrian Sampson and Professor Rachit Nigam

Professional Experience

2021-2023 **Compiler Engineer**, Google

2020-2021 **Research Assistant**, Computer Architecture & Programming Abstractions (CAPRA), Cornell University

2020 **Software Engineer Internship**, Google

2019 **Engineer Practicum Internship**, Google

2013-2017 **Sergeant, Marksmanship Instructor**, United States Marine Corps

Publications

CONFERENCES

Compilation of Shape Operators on Sparse Arrays, OOSPLA '24. Alexander J Root, Bobby Yan, Peiming Liu, **Christophe Gyurgyik**, Aart J.C. Bik, Fredrik Kjolstad

Stepwise Debugging for Hardware Accelerators, ASPLOS '23. Griffin Berstein, Rachit Nigam, **Christophe Gyurgyik**, Adrian Sampson

WORKSHOPS & SHORT PAPERS

Streaming Tensor Programs: A Programming Abstraction for Streaming Dataflow Accelerators, YArch '24. Gina Sohn, **Christophe Gyurgyik**, Genghan Zhang, Suguna Velury, Paul Mure, Nathan Zhang, Kunle Olukotun

A Toolkit for Designing Hardware DSLs, WOSET '21. Griffin Berstein, Rachit Nigam, **Christophe Gyurgyik**, Adrian Sampson

Awards, Fellowships, & Grants

2023 **Cloud Tech Impact Awards (CTIA) - LLM serving optimizations**, Google

2023 **Spot Bonus (VP of Engineering) - LLM compiler optimizations**, Google

2022-2023 **Peer Bonus** ×4, Google

2023 **Edwin Sibley Webster Graduate Fellowship**, MIT

2020 **Big Red Vets Land Grant**, Cornell University Veterans Association

Presentations

*presenting author; + mentored undergraduate

INVITED TALKS

Fall 2024. *Portal*. Machine learning compiler techniques and tribulations.

Summer 2024. *Cornell University CAPRA group*. Exploration of e-graph optimization for finite state machine generation.
Spring 2021. *Applications Driving Architectures (ADA)*. The Calyx language and its new frontends.

Teaching Experience

Winter 2025	CS343D: Domain-Specific Programming Models and Compilers , Teaching Assistant	<i>Stanford University</i>
Spring 2019	CS2110: Data Structures & Object Oriented Programming , Teaching Assistant	<i>Cornell University</i>
2015-2017	Marksmanship , Instructor	<i>Pu'uola Range, HI</i>

Mentoring

2024- Present	Arnold Tianyi Yang , Undergraduate, Stanford University	<i>Stanford, CA</i>
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Outreach & Professional Development

SERVICE AND OUTREACH

2018- Present	Cornell University Veterans Association , Member	<i>Ithaca, NY</i>
2019	Student Veterans of America , Volunteer	
2017	Rubicon , Disaster Relief	<i>Beaumont, TX</i>
2017	Girl Scouts of the USA , Volunteer	<i>Kilohanato, HI</i>
2017	AccesSurf , Lifeguard	<i>Oahu, HI</i>
2011-2013	Student Groups on Race Relations , Member	<i>Cleveland, OH</i>

OPEN SOURCE

Circuit Intermediate Representations (IR) Compilers and Tools (CIRCT), contributor and maintainer of the Calyx dialect.