Christophe P Gyurgyik

PhD Candidate in Computer Science, Stanford University

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Education

Stanford University 2023 - Present
Doctor of Philosophy Candidate, Computer Science

Cornell University 2018 - 2021
GPA: 3.904
Bachelor's Degree, Computer Science
Minor, Science & Technology Studies

Conference Publications

ASPLOS 2023 *"Stepwise Debugging for Hardware Accelerators"*
Griffin Berlstein, Rachit Nigam, **Christophe Gyurgyik**, and Adrian Sampson
Distinguished Artifact Award

Workshop Publications

WOSET 2021 "*A Toolkit for Designing Hardware DSLs*"
Griffin Berlstein, Rachit Nigam, **Christophe Gyurgyik**, and Adrian Sampson

Experience

XLA Compiler Team, Google 2021 - 2023
Focused on compiler support, extensibility, and optimization for the Accelerated Linear Algebra (XLA) Tensor Processing Unit (TPU) compiler. Achieved *x*% improvements to *end-to-end weighted latency* of large language models through compiler optimizations. Acquired C++ readability within 2 months. Authored over 150,000 lines of code and reviewed over 100,000 lines of code. Received one spot bonus and two peer bonuses.

Undergraduate Research Assistant, Cornell University 2020 - 2021
Part of the Computer Architecture & Programming Abstractions (CAPRA) group, led by Adrian Sampson. Under the supervision of Rachit Nigam, worked on Calyx, a compiler infrastructure for languages that target hardware accelerators. Achievements include shepherding the Calyx dialect into CIRCT and introducing multiple frontends used to guide language design and provide useful benchmarks.

Software Engineering Intern, Google 2020
Primarily entailed simplifying the storage of ad events from two separate stores to one using a new, generic remote procedure call service. Received two peer bonuses.

Engineering Practicum, Google 2019
The primary goal of this internship was to optimize the core database implementation of Sawmill Logs, an exabyte-scale data lake that supports internal Google analytics. Achieved improvement in the compression ratio by 10-15% for certain log storage types with minimal performance reduction.

Teaching Assistant, CS2110 *OOP and Data Structures,* Cornell University 2019
Facilitated weekly recitations for 40 students and held office hours to assist students in the course.

United States Marine Corps, Department of Defense 2013 - 2017
Served honorably in both leadership and instructor roles. Promoted 4 times in 4 years, and then obtained the rank of Staff Sergeant (E6) during the first promotion cycle after the end of active duty service. Received numerous awards for leadership and academic excellence.

Awards

Edwin Sibley Webster Graduate Fellowship	2023
Distinguished Artifact Award, ASPLOS	2023
Big Red Vets Land Grant	2020
VEX Robotics Amaze Award	2013

Volunteering

Cornell Undergraduate Veterans Association	2018 - 2021
Student Veterans of America	2019
Team Rubicon (hurricane disaster relief in Beaumont, Texas)	2017
Institute for Human Services	2017
AccesSurf	2017
Girl Scouts of the USA	2017
Hawaii Humane Society	2017
Puohala Elementary School	2016
Student Groups on Race Relations	2011 - 2013

Languages

English, French