CV

Name: Gennady Pekhimenko

Mail: pekhimenko@cs.toronto.edu, pekhimenko@cs.toronto.edu, info@vectorinstitute.ai, industry@vectorinstitute.ai

Phone:

Web Site: toronto.edu, toronto.edu

Address: Toronto, 5232 40 St George Street Toronto On M5S 2E4 Resume, 661 University Ave Suite 710 Tor

Education

• Meng, , Vector Institute, -

• Ma, Finance, University Of Toronto, -

• Phd, , Carnegie Mellon University, -2016

Work

• Postdoctoral Fellow, , Vector Institute, -

• Research Scientist, , Vector Institute, -

• Program Administrator, Computer Science, University Of Interest, -

Publications

• Efficient Program Compilation Through Machine Learning Techniques, 2010

• Echo: Compiler-Based Gpu Memory Footprint Reduction For Lstm Rnn Training, 2020

• Linearly Compressed Pages, 2012

• Skyline: Interactive In-Editor Computational Performance Profiling For Deep Neural Network Training, 2020

• Gretch, 2021

• Automatic Horizontal Fusion For Gpu Kernels, 2022

• Lifestream: A High-Performance Stream Processing Engine For Periodic Streams, 2021

• Pockettrend, 2015

• Simultaneous Multi-Layer Access, 2016

• Gist: Efficient Data Encoding For Deep Neural Network Training, 2018

• Janus, 2019

• Towards Breaking The Memory Bandwidth Wall Using Approximate Value Prediction, 2018
• Streambox-Hbm, 2019
• Rfvp, 2016
• Chargecache: Reducing Dram Latency By Exploiting Row Access Locality, 2016
• Mitigating The Memory Bottleneck With Approximate Load Value Prediction, 2016
• Adaptive-Latency Dram: Optimizing Dram Timing For The Common-Case, 2015
• A Case For Toggle-Aware Compression For Gpu Systems, 2016
• Shifted Hamming Distance: A Fast And Accurate Simd-Friendly Filter To Accelerate Alignment Verification In Read Mapping, 2015
• Toggle-Aware Compression For Gpus, 2015

Skills

• Programming
• Computer Organization
• Architecture
• Machine Learning For Systems
• Computer Architecture
• H
• Parallel Computer Architecture
• Csc
• C
• Parallel
• Systems For Machine Learning
• Stream Processing
• Compiler Optimization

Courses

• Fall 2021 Csc 2224H Parallel Computer Architecture And Programming
• Fall 2019 Csc 2224H Parallel Computer Architecture And Programming
• Fall 2017 Csc 2231H Parallel Computer Architecture And Programming
• Fall 2018 Csc 2224H Parallel Computer Architecture And Programming
• Winter 2020 Csc D70H Compiler Optimization

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• Winter 2021 Csc D70H Compiler Optimization
• Winter 2019 Csc D70H Compiler Optimization
• Winter 2018 Csc D70H Compiler Optimization
• Fall 2020 Csc B58H Computer Organization

Awards

• Qualcomm Innovation Fellowship Finalist 20152016
• Facebook Httpswwwfacebookcomfellowshipfellowship Finalist
• Asplos 2015 Acm Student Research Competition First Place March 2015
• Nvidia Graduate Fellowship 20152016

Services

• Publicity Cochair
• Program Committee Member
• Ics 2018
• Micro 2018