2696 Antietam Court, Ann Arbor, MI 48105 szekany@umich.edu | (734) 239-3772

#### **EDUCATION**

## University of Michigan, Ann Arbor, MI

Ph.D. in Computer Science and Engineering M.S. in Computer Science and Engineering

May 2016 - May 2019 (expected)

January 2014 - May 2016

Relevant Coursework: Computer Architecture (EECS 470/570), Operating Systems (EECS 482), Compilers (EECS 583), Databases (EECS 484), Artificial Intelligence (EECS 592)

GPA: 3.65/4.0

Non-Degree Student in Computer Science

May 2012 - December 2013

Earned 24 credit hours in undergraduate program prior to admission to M.S. program

GPA: 3.9/4.0

Bachelor of Science in Physics

December 2008

## RELEVANT EXPERIENCE

## University of Michigan Computer Science and Engineering Program, Ann Arbor, MI

Graduate Student Instructor

January 2015 - Present

- Teach lab sections of EECS 470, a graduate-level course on out-of-order, superscalar processor design
- Final student evaluations on effectiveness of instruction: 4.9/5

#### **ARM**, Austin, TX

CPU Design Engineer Intern

May 2015 - August 2015

- Member of validation team for a confidential CPU product
- Wrote SystemVerilog interface for an assembly test generation tool

## Boeing, Seattle, WA

Software Engineering Intern

May 2014 - July 2014

- Developed new features for an internal tool to aid purchasing department in strategic decision-making
- Discovered and patched security vulnerabilities and handled emergent issues

## University of Michigan Biopsychology Lab, Ann Arbor, MI

Research Laboratory Specialist

June 2010 - April 2014

- As lab manager, was responsible for administration, equipment, and software programming
- Coded data analysis program to produce statistical results, plots, and other data visualizations

#### AWARDS

University of Michigan Rackham Graduate Fellowship Award

November 2014

Michigan Initiative for Innovation & Entrepreneurship Commercialization Grant

October 2013

## SELECTED **PROJECTS**

## Statically Predicting Program Behavior

January 2016 - October 2016

• Trained LSTM neural network to predict and classify likely execution paths for arbitrary code

## Approximate Neural Networks

February 2015 - April 2015

- Studied the effect of reduced precision multiply operations on MNIST benchmark
- Found precision can be substantially reduced without significantly altering outcome

## Computer Architecture Design Project

January 2014 - April 2014

• Designed a fully synthesizable, out-of-order, superscalar processor using SystemVerilog

# PROFESSIONAL **MEMBERSHIP**

## VOLUNTEER & Scoutmaster, Troop 8, Ann Arbor

January 2009 - Present

- Principal adult volunteer for an active outdoor program of approximately 50 youth
- Lead multiple weekend trips each month and 3-4 weeklong trips each year

Eta Kappa Nu (HKN), Beta-Epsilon chapter, University of Michigan January 2015 - Present

Board Member, Friends of the Washtenaw Veterans Treatment Court December 2014 – Present