# **Matthew Vilim**

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### Education

### **Stanford University**

PhD, Electrical Eng. Sep 2016 – Present Advised by Kunle Olukotun

GPA: 4.07

- Languages, compilers, and architectures for FPGAs and reconfigurable accelerators

# **Stanford University**

MS, Electrical Eng. Sep 2016 – March 2018 GPA: **3.95** 

# U of I (UIUC)

BS, Computer Eng. Aug 2012 – Dec 2015 - Highest Honors

GPA: **3.95** 

- University Honors (top 3% of College of Engineering)

# - Work Experience

#### **NVIDIA**

GPU Verification Intern March 2016 - Aug 2016 Santa Clara, CA

- Contributed to features and performance of Volta randoms program generator
- Worked with GPU architecture team to test and verify Volta memory model

#### **NVIDIA**

Systems Software Intern Summers 2014, 2015 Santa Clara, CA

- Developer on Mac OS X graphics drivers team
- Ported features only implemented in Windows drivers to OS X drivers

### **Argonne (ANL)**

Research Intern Summers 2012, 2013 Lemont, IL

Developer on GREET (greet.es.anl.gov), a model of U.S. emissions

#### Entrepreneur

Computer service business 2008, 2012

- Sole proprietor of business with 180 customers, logging over 1500 hours
- Performed services such as computer setup and maintenance, network installation

# Research Experience —

## **Prof. Kunle Olukotun**

Stanford University Sep 2017 – Dec 2017  Y. Zhang, A. Rucker, M. Vilim, et al. "Compiler-Directed Hybrid Networks for Spatial Architectures." ASPLOS, 2019. (Submitted)

#### **Prof. Rakesh Kumar**

UIUC Fall 2015

- Developed technique to increase Bitcoin mining profits
- M. Vilim, H. Duwe, R. Kumar, "Approximate Bitcoin Mining." DAC, 2016.