

Daniel Gordon

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<https://danielgordon10.github.io/>

Education

The University of Washington

2014-2020

Ph. D. student in Computer Science.

Advised by Dieter Fox and Ali Farhadi

The University of Washington

2016

Masters in Computer Science

Washington University in St. Louis

Graduated May 2014

Bachelor of Science in Computer Science

Second Major in Entrepreneurship

Summa Cum Laude – GPA: 3.96, Engineering Class Rank: 8/323

Undergraduate Research Advised by Robert Pless

Publications

Watching the World Go By: Representation Learning from Unlabeled Videos

Arxiv 2020

Daniel Gordon, Kiana Ehsani, Dieter Fox, Ali Farhadi

What Can You Learn from Your Muscles? Learning Visual Representations from Human Interactions

Arxiv 2020

Kiana Ehsani, Daniel Gordon, Thomas Nguyen, Roozbeh Mottaghi, Ali Farhadi

ALFRED: A Benchmark for Interpreting Grounded Instructions for Everyday Tasks

CVPR 2020

Mohit Shridhar, Jesse Thomason, Daniel Gordon, Yonatan Bisk, Winson Han, Roozbeh Mottaghi, Luke Zettlemoyer, Dieter Fox

SplitNet: Sim2Sim and Task2Task Transfer for Embodied Visual Navigation

ICCV 2019

Daniel Gordon, Abhishek Kadian, Devi Parikh, Judy Hoffman, Dhruv Batra

What Should I Do Now? Marrying Reinforcement Learning and Symbolic Planning

Arxiv 2018

Daniel Gordon, Dieter Fox, Ali Farhadi

Shifting the Baseline: Single Modality Performance on Visual Navigation & QA

NAACL 2019

Jesse Thomason, Daniel Gordon, Yonatan Bisk

Short

IQA: Visual Question Answering in Interactive Environments

CVPR 2018

Daniel Gordon, Aniruddha Kembhavi, Mohammad Rastegari, Joseph Redmon, Dieter Fox, Ali Farhadi

Received the Nvidia Pioneering Research Award at CVPR 2018

AI2-THOR: An Interactive 3D Environment for Visual AI

Eric Kolve, Roozbeh Mottaghi, Daniel Gordon, Yuke Zhu, Abhinav Gupta, Ali Farhadi

Technical Report
2017

Re3: Real-Time Recurrent Regression Networks for Object Tracking

Daniel Gordon, Ali Farhadi, Dieter Fox

RA-L 2018

Visual Semantic Planning using Deep Successor Representations

Daniel Gordon, Yuke Zhu, Eric Kolve, Dieter Fox, Li Fei-Fei, Abhinav Gupta, Roozbeh Mottaghi, Ali Farhadi

ICCV 2017

Collaborative Rephotography

Ruth West, Abby Halley, Daniel Gordon, Jarlath O'Neil-Dunne, Robert Pless

SIGGRAPH 2013
Studio Talks

Collaborative Imaging of Urban Forest Dynamics: Augmenting Rephotography to Visualize Changes over Time

Ruth West, Abby Halley, Jarlath O'Neil-Dunne, Daniel Gordon, Robert Pless

IS&T/SPIE 2013

Service

Co-organizer of 1st Workshop on Visual Understanding Across Modalities and THOR competition

<http://vuchallenge.org/>

CVPR 2017

Organizer of Deep Learning in Practice Seminar Talk Series

<https://sites.google.com/cs.washington.edu/deeplearninginpractice/>

Summer 2017

Work Experience

Third Wave Automation:

Team Lead: Perception and Pallet Manipulation

- Oversee a team of 5 engineers serving as both a manager and a contributor for several major projects
- Facilitated cross-team collaboration resulting in doubling the success rate of autonomous workflows

June 2020 – Present
Jan 2023 – Present

Tech Lead: Perception

- Led a team of 3 engineers working on major features for the core competencies of the product
- Contributed technical design expertise throughout the code stack
- Pioneered Python type checking throughout the codebase

Jan 2022 – Dec 2022

Independent Contributor: Perception

- Designed and implemented many visual algorithms for the core product including object detection and tracking, pose estimation, local mapping and collision checking, and several safety systems

June 2020 – Dec 2021

Facebook AI Research (FAIR):

Winter 2019

Research Intern – A-STAR Team with Dhruv Batra

- Conducted research resulting in the ICCV publication “SplitNet: Sim2Sim and Task2Task Transfer for Embodied Visual Navigation”

Allen Institute for Artificial Intelligence:

Winter 2017

Research Intern – PRIOR Team with Roozbeh Mottaghi

- Conducted research resulting in the ICCV publication “Visual Semantic Planning using Deep Successor Representations”

Google:

Software Engineering Intern – Google Maps

Summer 2013,

- Designed and programmed the Street View Time Machine frontend
- Increased polish and feature improvement on the new Maps frontend

Summer 2014

Engineering Practicum Intern – Google Wallet

Summer 2012

- Integrated an autocomplete feature to the Wallet website
- Added Google+ profile images and names to various Wallet pages
- Created the Wallet dashboard page and recent transaction widget

Teaching Experience

Teaching Assistant at the University of Washington

Introduction to Deep Learning: Head TA

Fall 2018, Fall 2019

- Wrote Numpy-based Pytorch-like library for deep learning assignments and autograder for grading
- Managed 5 other TAs and 160 students

Teaching Assistant at Washington University in St. Louis

Introduction to Artificial Intelligence

Spring 2013, Spring 2014

Algorithms and Data Structures

Fall 2013

Logic and Discrete Mathematics

Fall 2012

Introduction to Computer Science

Fall 2010-Spring 2012

Honors and Awards

NVIDIA Graduate Fellowship (1 of 10 awardees from 230+ applicants)

2019

National Science Foundation GRFP Honorable Mention (Top 1/3rd of applicants)

2015 and 2016

Wissner-Slivka Fellowship (University of Washington CSE)

2014

Achievement Rewards for College Scientists Fellowship (UW CSE 1 of 2 awardees)

2014-2016

Outstanding Senior Award – Computer Science (Washington University)

2014

Sigma Xi (Washington University)

Inducted Spring 2014

Upsilon Pi Epsilon (Washington University Top 1/3rd of CSE Class)

Inducted Fall 2013

Tau Beta Pi (Washington University Top 1/8th of Engineering Class)

Inducted Fall 2012

Patents

Providing a thumbnail image that follows a main image

April 3, 2018

US Patent 9,934,222

Display screen with graphical user interface or portion thereof

March 14, 2017

US Patent D780,795

Technical Skills

Proficient in	Python, Java, PyTorch, C++ , TensorFlow, Caffe, Git, HTML, CSS
Capable in	Bazel, Matlab, Javascript, Google Closure, Android, PHP, Mercurial, C#, LaTeX
Basic Knowledge	CUDA, Objective-C/Cocoa, iPhone, MySQL, C, JQuery, Unix Terminal

Open Source Repositories

VINCE: <https://github.com/danielgordon10/vince>

Deep Learning Class Numpy Library: <https://gitlab.com/danielgordon10/dl-class-2019a>

SplitNet: <https://github.com/facebookresearch/splitnet>

AI-Habitat: <https://github.com/facebookresearch/habitat-api>

AI2-THOR: <https://github.com/allenai/ai2thor>

Re3: <https://github.com/danielgordon10/re3-tensorflow>

Re3-Pytorch: <https://github.com/danielgordon10/re3-pytorch>

IQA: <https://github.com/danielgordon10/thor-iqa-cvpr-2018>
