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| Daniel Gordon  [danielgordon@cs.washington.edu](mailto:danielgordon@cs.washington.edu)  <https://danielgordon10.github.io/> | | | | | | | | | | | | | |
| Education | | | | | | | | | | | |  | |
| **The University of Washington**  Ph. D. in Computer Science  Advised by Dieter Fox and Ali Farhadi | | 2014 – 2020 | | | | | | | | | | | |
| **The University of Washington**  Masters in Computer Science | | | | | | | | 2016 | | | | | |
| **Washington University in St. Louis**  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 | | | | | 2010 – 2014 | | | | | | | | |
| Work Experience | | | | | | | | | | | | | |
| **Apple Maps 3DV:**  Senior Machine Learning Engineer   * Responsible for diffusion, semantic segmentation, and detection models being run on imagery at world scale * Developed end-to-end models for predicting 3D vectorized maps from raw pixels | | | | | | | | | Apr 2024 – Present | | | | |
| **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   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   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 | | | | | | | | | Jun 2023 – Mar 2024    Jan 2022 – Dec 2022  Jun 2020 – Dec 2021 | | | | |
| **Facebook AI Research (FAIR):**  Research Intern – A-STAR Team with Dhruv Batra   * Conducted research resulting in the ICCV publication “SplitNet: Sim2Sim and Task2Task Transfer for Embodied Visual Navigation” | | | | | | | | | Winter 2019 | | | | |
| **Allen Institute for Artificial Intelligence:**  Research Intern – PRIOR Team with Roozbeh Mottaghi   * Conducted research resulting in the ICCV publication “Visual Semantic Planning using Deep Successor Representations” | | | | | | | | | Winter 2017 | | | | |
| **Google:** | | | | | | | | |  | | | | |
| Software Engineering Intern – Google Maps   * Designed and programmed the Street View Time Machine frontend * Increased polish and feature improvement on the new Maps frontend | | | | | | | | | Summer 2013,  Summer 2014 | | | | |
| Engineering Practicum Intern – Google Wallet   * 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 | | | | | | | | | Summer 2012 | | | | |
| Publications | | | | | | | | |  | | | | |
| **Learning by Watching and Learning by Doing**Ph.D. Thesis | | | | | | | | | 2020 | | | | |
| **Watching the World Go By: Representation Learning from Unlabeled Videos**Daniel Gordon, Kiana Ehsani, Dieter Fox, Ali Farhadi | | | | | | | | | Arxiv 2020 | | | | |
| **What Can You Learn from Your Muscles? Learning Visual Representations from Human Interactions** Kiana Ehsani, Daniel Gordon, Thomas Nguyen, Roozbeh Mottaghi, Ali Farhadi | | | | | | | | | Arxiv 2020 | | | | |
| **ALFRED: A Benchmark for Interpreting Grounded Instructions for Everyday Tasks**  Mohit Shridhar, Jesse Thomason, Daniel Gordon, Yonatan Bisk, Winson Han, Roozbeh Mottaghi, Luke Zettlemoyer, Dieter Fox | | | | | | | | | | | | | CVPR 2020 |
| **SplitNet: Sim2Sim and Task2Task Transfer for Embodied Visual Navigation**  Daniel Gordon, Abhishek Kadian, Devi Parikh, Judy Hoffman, Dhruv Batra | | | | | | | | | | | ICCV 2019 | | |
| **What Should I Do Now? Marrying Reinforcement Learning and Symbolic Planning**  Daniel Gordon, Dieter Fox, Ali Farhadi | | | | | | | | | Arxiv 2018 | | | | |
| **Shifting the Baseline: Single Modality Performance on Visual Navigation & QA**  Jesse Thomason, Daniel Gordon, Yonatan Bisk | | | | | | | | | | | NAACL 2019 Short | | |
| **IQA: Visual Question Answering in Interactive Environments**  Daniel Gordon, Aniruddha Kembhavi, Mohammad Rastegari, Joseph Redmon, Dieter Fox, Ali Farhadi  Received the Nvidia Pioneering Research Award at CVPR 2018 | | | | | | | | | | | | CVPR 2018 | |
| **AI2-THOR: An Interactive 3D Environment for Visual AI**  Eric Kolve, Roozbeh Mottaghi, Daniel Gordon, Winson Han, Eli VanderBilt, Luca Weihs, Alvaro Herrasti, Matt Deitke, Kiana Ehsani, 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 | |
| Teaching Experience | | | | | | | | | | | |  | |
| **Teaching Assistant at the University of Washington**  Introduction to Deep Learning: Head TA   * Wrote Numpy-based Pytorch-like library for deep learning assignments and autograder for grading * Managed 5 other TAs and 160 students | | | | | | | Fall 2018, Fall 2019 | | | | | | |
| **Teaching Assistant at Washington University in St. Louis**  Introduction to Artificial Intelligence  Algorithms and Data Structures  Logic and Discrete Mathematics  Introduction to Computer Science | | | | Spring 2013, Spring 2014  Fall 2013  Fall 2012  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**  US Patent 9,934,222 | | | | | | | | | | | | April 3, 2018 | |
| **Display screen with graphical user interface or portion thereof**  US Patent D780,795 | | | | | | | | | | | | March 14, 2017 | |
| Technical Skills | | | | | | | | | | | |  | |
| **Proficient in** | Python, Java, PyTorch, C++, 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, JQuery, Unix Terminal | | | | | | | | | | | | |
| Open Source Repositories | | | | | | | | | | | |  | |
| **VINCE:** https://github.com/danielgordon10/vince **YouTube8M Data:** <https://github.com/danielgordon10/youtube8m-data> **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> | | | | | | | | | | | | | |