Connor Lin

linkedin.com/in/connor-lin-cmuscs
connorlin@cmu.edu | 443.303.6172

EDUCATION

CARNEGIE MELLON UNIVERSITY
MS in Computer Science
Research Thesis Program
Aug 2019
Advisor: Keenan Crane

CARNEGIE MELLON UNIVERSITY
School of Computer Science
Minor in Robotics
May 2018 | University Honors
GPA: 3.88 | Dean's List (5x)

COURSEWORK

GRADUATE
Machine Learning (PhD)
Computational Photography (PhD)

UNDERGRADUATE
Computer Graphics
Distributed Systems
Computer Systems
Parallel Algorithms & Data Structures
Imperative Computation
Functional Programming
Deep Learning
Algorithm Design & Analysis
Great Theoretical Ideas in CS
Complexity Theory
Software Security & Privacy
General Robotics

TECHNICAL SKILLS

Proficient
Python • C++ • C • Standard ML
Linux/Unix • Windows • OSX
Experienced
C# • Unity • Unreal Engine • Go
Java • Scala • Matlab • Git • LaTeX

PROJECTS

URBAN SEARCH & RESCUE
Robotics Competition (2nd)
2018 | Carnegie Mellon University

ARTBYTES3: ART PANDORA
Most Innovative App
2015 | Walter's Art Museum

GOPILOT: MEDICAL SIRI
Most Useful App (2nd)
2015 | University of Pennsylvania

EXPERIENCE

GOOGLE | Software Engineering Intern
Summer 2018 | New York, NY

- Worked on the Google Daydream team to develop virtual and augmented reality apps that employ machine learning and computer graphics.
- Implemented a virtual reality plugin for Unity using C# and C++ that dynamically recognizes and morphs user virtual handwriting into text.
- Prototyped an augmented reality android app in Unreal Engine using C++ that also understands and morphs user handwriting on planar surfaces.

YAHOO! | Software Engineering Intern
Summer 2017 | Sunnyvale, CA

- Implemented code logic in Scala that connects an assistant Kik bot to direct chats with users and an image processing service that manipulates user images.
- Developed an image processing tool in Python that automatically generates a variety of magazine covers from user images using dlib and OpenCV for face and contour detection, as well as machine learning models to predict emotion.
- Designed and implemented Swagger API in Scala that fetches recommendations for discounts and similar consumer products for shopping emails in Yahoo mail.

METTLER TOLEDO | Software Quality Assurance Intern
Summer 2016 | Columbia, MD

- Managed pre-production scripts to ensure product safety and intuition when deploying new code and features, primarily managed in Visual Studio and C#.
- Optimized legacy code through smoke, regression, and performance testing and detected sources of error prone features from newer updates.

CARNEGIE MELLON UNIVERSITY | Teaching Assistant
Spring & Fall 2017 | Pittsburgh, PA

- Computer Graphics (2x TA) - assisted students in building their own SVG rasterizer, 3D mesh editor, offline Monte-Carlo raytracer, and animator in C++.
- Imperative Computation - introduced students to data structures and algorithms through labs, emphasizing correctness of code using contracts in C0.

RESEARCH

INSTITUTE FOR SOFTWARE RESEARCH | Spring 2018 - Present
Advisor: Pooyan Jamshidi, Carnegie Mellon University

- Exploring design space of deep neural networks in terms of network architecture, hyper-parameters, and deployment over hybrid environments.
- Developing genetic algorithms to optimize structure of neural networks.

COMPUTER GRAPHICS GROUP | Fall 2017 - Present
Advisor: Keenan Crane, Carnegie Mellon University

- Implemented 3D fabrication techniques in C++ using cut optimization algorithms and successfully produced real world models with a cut printer.
- Presented work at Carnegie Mellon's Undergraduate Research Showcase.

THE ROBOTICS INSTITUTE | Fall 2015 - Spring 2016
CoBot Robots and BioRobotics Lab, Carnegie Mellon University

- Implemented a motion-sensor using Arduino for CoBot to deliver candy.
- Worked with the Da Vinci Medical Research Kit used for minimally invasive surgery to improve quality number of Trakstar data.