

# Max Ogryzko

**Email:** m.ogryzko@columbia.edu

**Phone:** 206-290-8597

**GitHub:** github.com/mogryzko

## EDUCATION

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### **Columbia University, New York, NY**

GPA 3.5/4

Bachelor of Science in Computer Science \*

### **Whitman College, Walla Walla, WA**

Bachelor of Arts in Mathematics/Computer Science \*

\* Dual Degree Program

## SKILLS

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Languages: Python, C++, Java, Javascript, SQL

Libraries: PyTorch, OpenCV, scikit-learn, NumPy, Pandas, matplotlib, Bokeh

Version Control: Git/GitHub

Cloud Services: AWS, Google Cloud

## PROFESSIONAL EXPERIENCE

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### **Kohn Pedersen Fox - Machine Learning Intern**

New York, NY | Summer 2019

- Sped up daylight and wind speed analysis by 1000x using deep learning models
- Incorporated clustering techniques into KPFui's workflow and client-facing web apps

### **Columbia University – Teaching Assistant**

New York, NY | Fall 2018

- Collaborated with a team of TAs covering Professor Tony Dear's Artificial Intelligence course
- Ran recitation sections, graded homework, and hosted weekly office hours

## PROJECTS

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### **Deep Learning Based Wind Speed Simulation**

Kohn Pederson Fox | Summer 2019

Skills: Computer Vision, AWS, Deep Learning

- A 3D modeling software plug-in that provides wind speed estimates for architectural workflows
- Provides results in 1-2 seconds, compared to 30-90 minutes with a physics simulation
- Reduced average error to >1 m/s

### **Fully Autonomous Jump Exaggeration Application**

Personal Project | Spring 2019

Skills: Computer Vision, Deep Learning

- Load in a video of a jump and hyper-realistically exaggerate vertical as much as you like
- Uses deep learning to find jumper within each frame, stabilizes input video, determines jump start and end frames, moves pixels containing jumper upwards to exaggerate jump, fills in previous jumper pixels with hyper-realistic substitutes

### **Building Recognition Application**

Columbia University | Fall 2018

Skills: Computer Vision, Optics, Data Processing

- Smartphone application that overlays the outline of any NYC building on user's camera screen and provides relevant information about that building

### **Deep Learning Based Basketball Game**

Personal Project | Summer 2018

Skills: Deep Learning, Data Cleaning, Data Processing

- Play against an LSTM-based AI that imitates your favorite NBA player in defensive scenarios