Przemek Gardias

Palo Alto, CA | pgardias.com | przemek.gardias@gmail.com | 650-445-9191

EDUCATION

Worcester Polytechnic Institute — **Worcester, MA**
M.Sc. Computer Science — 3.7/4.0 GPA — *May 2020 - May 2021*
B.Sc. Computer Science Cum Laude — *Aug. 2016 - May 2020*

PROJECTS

M.Sc. Thesis: Identifying Positive Classroom Climate — *May 2020 - May 2021*
- Created a deep learning system in PyTorch for evaluating classroom Positive Climate (PC) based on student-instructor interactions
- Built a novel dataset for learning child identities by matching face images to fine-tune an embedding network to 0.98 AUC for consistent feature extraction from classroom video
- Trained a graph convolution network to infer PC from a social graph and then provide teachers feedback about overall PC and warnings of 30-second intervals of a low PC environment

Enhanced Residual Networks for Context-based Image Outpainting — *Jan. 2020 - May 2020*
- Designed a generative adversarial network with residual pathways and joint local and global discriminators for image outpainting on Places365-Standard
- Published results with improved feature consistency and 26% lower adversarial loss: arXiv:2005.06723 [eess.IV]

Automated Corrosion Assessment and Data Collection — *Jan. 2020 - May 2020*
- Created software to automate corrosion sample collection by U.S. Army Research Lab data scientists, then validated workflow and system functionality on-site at Cape Canaveral Air Force Station
- Developed iOS application and Django RESTful API to transmit encrypted sample data and serve endpoints for machine learning model predictions of corrosion ratings as per ASTM D1654

B.Sc. Thesis: Augmented Reality for Improving Human-Swarm Interaction — *Aug. 2019 - Mar. 2020*
- Designed a Magic Leap application through which a user commands a swarm of robots to move real objects by manipulating their virtual representations using an intuitive combination of voice and gesture controls
- Provided visual feedback to the user about the state of the swarm, such as color-coding robots and the object they cooperatively move or highlighting robots which fail to communicate

WORK EXPERIENCE

Worcester Polytechnic Institute — **Worcester, MA**
Teacher's Assistant — *Aug. 2020 - May 2021*
- Assisted with teaching and grading for CS 541: Deep Learning and CS 4518: Mobile & Ubiquitous Computing

Graduate Research Assistant — *May 2020 - Aug. 2020*
- Collaborated with Professor Whitehill to proof tracking-based CLASS climate prediction models in simulation

Proofpoint — **San Francisco, CA**
Software Engineer Intern — *Jun. 2019 - Aug. 2019*
- Developed containerized testing environment with CLI for quick, iterative testing on developer machines
- Created product backend testing jobs in Jenkins deployment pipeline, towards full CI/CD automation

Cloudflare — **San Francisco, CA**
Sales Operations Engineer Intern — *Jun. 2018 - Aug. 2018*
- Developed scripts for asynchronous evaluation of client site service status for 100x speed-up
- Designed heuristic-based systems to generate sales leads using scraped data

SKILLS

Languages: Python, C++, Java, Go, C, Bash
Frameworks: NumPy, PyTorch, TensorFlow, Keras, SciKit, SciPy, OpenCV, Pandas, Matplotlib
Software: Linux, Git, Jupyter Notebook, Docker, CUDA, Make
Compute: Amazon Web Services, Google Cloud Platform, SLURM-based Linux clusters
Awards: Dean's List: Fall 2017, Fall 2018, Spring 2020