

Anastasis Stathopoulos

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EDUCATION

Rutgers University

Piscataway, NJ, USA

Ph.D. Student in Computer Science

Sept. 2018 - Present

- **Advisor:** Dimitris Metaxas  | **GPA:** 3.96/4.00
- **Research Area:** Computer Vision and Deep Learning

National Technical University of Athens (NTUA)

Athens, Greece

Integrated Masters in Electrical & Computer Engineering (ECE)

Oct. 2012 - June 2018

- **Major:** Computer Engineering | **GPA:** 8.12/10.00
- **Thesis:** Real-time Joint Object Detection and Semantic Segmentation for Autonomous Driving

EXPERIENCE

Amazon Prime Video, Video Compliance & Classification

Seattle, WA, USA

Applied Science Intern | Video Understanding

May 2020 - Aug. 2020


- Self-Supervised Video Representation Learning
- Representation Learning for Human Activity Recognition
- **Technologies:** Python • PyTorch • Apache MXNet

Rutgers University, Computer Science Department, CBIM

Piscataway, NJ, USA

Research Assistant | Advisor: Dimitris Metaxas

Sept. 2018 - Present

- Shape Reconstruction from a Single Image (*Current Work*)
- Deception Detection in Videos using Robust Facial Features (*FTC 2020*)
 - ◊ Built model to detect deception in videos based on visual cues
 - ◊ Surpassed previous SOTA methods on the task
 - ◊ Proposed mechanism to interpret the model's prediction as a function of the FAUs
- Unbiased Auxiliary Classifier GANs (*CVPRW 2020*) 
 - ◊ Reduced bias in GANs by estimating the Mutual Information between the generated data distribution and the labels
 - ◊ Evaluated on Image Generation datasets surpassing previous methods
 - ◊ Metrics: Inception Score and Frenchet Inception Distance
- **Technologies:** Python • PyTorch

Teaching Assistant

Sept. 2018 - May 2020

- CS:112: Data Structures (*Spring 2019, 2020*)
- CS:596: Topics in the Foundations of Computer and Data Science (*Fall 2019*)
- CS:314: Principles of Programming Languages (*Fall 2018*)
- **Technologies:** Java • Matlab • Haskell • Prolog

National Technical University of Athens (NTUA), ISLAB

Athens, Greece

Research Assistant | Thesis Preparation | Advisor: Andreas Stafylopatis

Sept. 2017 - June 2018

- Built model for joint Semantic Segmentation and Object Detection via a unified architecture
- Road Segmentation and Vehicle Detection in the KITTI dataset | Inference speed: 12 fps
- **Technologies:** Python • Tensorflow • Keras

Rutgers University, ECE department, RADICAL

Piscataway, NJ, USA


Visiting Researcher | Host: Shantenu Jha

Summer 2016




- Implemented the Watershed Segmentation Algorithm and applied it to cell tissue images

- Conducted experiments in parallel and distributed environments to characterize its performance
- **Technologies:** Python • Radical Pilot • Apache Spark

PUBLICATIONS

- [1] **Anastasis Stathopoulos**, Ligong Han, Norah Dunbar, Judee K. Burgoon, Dimitris Metaxas, "Deception Detection in Videos using Robust Facial Features". *In Proceedings of Future Technologies Conference (FTC), 2020*. **Best Student Paper Award**
- [2] Ligong Han, **Anastasis Stathopoulos**, Tao Xue, Dimitris Metaxas, "Unbiased Auxiliary Classifier GANs with MINE". *In CVPR workshop on Adversarial Machine Learning in Computer Vision, 2020*.  **Oral Presentation DeepMind Travel Award**

TECHNICAL PROJECTS

- Plug-and-Play Controlled Text Generation via Attribute-based Attention**  *Spring 2020*
- Proposed and built the first *plug-and-play* model that handles infobox-style *attribute-value pairs* for *conditional text generation*
 - Combined a pre-trained unconditional language model (GPT-2) with an NER tagging system (BERT-based attribute classifier) for controllable text generation without fine-tuning
 - **Technologies:** Python • PyTorch
- Missing-Data Imputation**  *Spring 2019*
- Implemented a variation of an autoencoder to impute missing data in the dataset
 - Treated the task of filling arithmetic and categorical values uniformly
 - **Technologies:** Python (no DL frameworks used - implemented everything from scratch) • Pandas
- Chord Protocol Implementation**  *Fall 2016*
- Implemented (i) *sequential replica consistency* and (ii) *eventual replica consistency* versions of the Chord protocol
 - **Technology:** Erlang

TECHNICAL SKILLS

Programming Languages: Python, C/C++, Java, Matlab, Erlang, Haskell, HTML/CSS
Frameworks: PyTorch, TensorFlow, MXNet, Keras, GlueCV, OpenCV
Tools and Platforms: Linux, Mac OSX, Windows, AWS, Git, Vim, L^AT_EX, Scrum, Kanban Board, MySQL, MongoDB

SOFT SKILLS

Self-motivated | Proactive | Easy-going | Enthusiastic to learn new things
Languages: *Greek* (Native), *English* (Fluent, level C2), *German* (Advanced, level C1)

HONORS AND AWARDS

Best Student Paper Award, FTC 2020	<i>2020</i>
DeepMind Travel Award, CVPR 2020 workshop on Adversarial ML in Computer Vision	<i>2020</i>
Gerondelis Graduate Student Fellowship Award, Gerondelis Foundation	<i>2019</i>

ACADEMIC SERVICE

Volunteer: SPAWC 2018
Reviewer: CVPR 2021, ICCV 2021