Theodore Panagiotopoulos

Software Engineer - Georgia Tech

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Objective: "Use technology to enhance the capabilities and experiences of people."

EDUCATION

M.S. in Computer Science

Georgia Institute of Technology | 4.0

Aug 2017 – May 2019 (est.) Atlanta, GA

- Specialization in Computer Graphics and Vision.
- Research in Head Mounted Displays and Wearables with Prof. Thad Starner.

B.E. in Electrical & Computer Engineering

University of Patras | 7.82/10

Sept 2011 – July 2016 Patras, Greece

- 5yr degree -ranked in top 12% of class.
- Research in Computer Vision & Graphics with Prof. Konstantinos Moustakas.

EXPERIENCE

Head Teaching Assistant - A.I.

Georgia Institute of Technology

Jan 2018 – present Atlanta, GA

- Responsible for substitute teaching, course content, exam questions etc.
- Leading a team of 13 GTAs, managing 450 online graduate students and 140 on-campus.
- Started as a GTA in Spring 2018, worked on topics like Machine Learning, Game Playing, Logic & Planning etc.

Python | Docker

Augmented Reality Intern

Amway R&D

May 2018 – Aug 2018 Grand Rapids, MI

- Developed Augmented Reality, interactive packaging applications, bringing animated characters to life.
- Presented live prototypes to 100 Amway employees, including management.

Obj-C | iOS | Vuforia | OpenGL ES | ARKit | SceneKit | Blender

Software Engineer Intern

Mantis Informatics S.A.

Summers 2015, 2016 Athens, Greece

- Developed Head Mounted Display applications for Warehouse environments.
- Investigated potential of in-doors registered AR applications.

Java | Android | Moverio BT-200 | Vuzix M100

PROJECTS *- (highlighted)*

Sign Language Recognition for Kids - current

- Video Game (CopyCat) helping hearing-impaired kids develop their short-term memory.
- Currently working on a recognition system (camera, leap motion) for sign language recognition.

Leap Motion | Unity | OpenPose

Head Mounted Displays in Order Picking - 2018

- Developed a novel HUD-RFID setup to improve picker efficiency in warehouses. *(ISWC publication)*
- Designed an in-doors Navigation system for Google Glass.

Java | Android | Google Glass

Lattice Mesh Generation - 2017

- Developed a 3D lattice generation algorithm, able to create a robust lattice structure between two surfaces.
- Single-Mesh ready for 3D printing (medical use).

Java | Processing | OpenGL

Augmented Reality Maps - 2016

- Mobile App recreating Maps in 3D. *(SCIA publication)*
- Contour Map recognition, segmentation and reconstruction.
- User can interact with the terrain, adding roads and other features.

C++ | OpenCV | Android | Java | Vuforia | OpenGL ES

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+ PROJECTS *- more information on theopanag.com*

Tetris 3D

2015

- Created a 3D, Virtual Reality remake of the classic video game, Tetris.
- More than 50.000 views on YouTube.

C++ | OpenGL | Virtual Reality | Oculus Rift

Ancient Conquest – *Medieval II Total War Game Modification*

2014

- Complete overhaul of SEGA's title, set in Ancient Greece.
- More than 5.000 downloads, 2 spin-offs and many blog features and reviews.

Python | 3ds Max | Game Design

PUBLICATIONS

"RF-Pick: Order Picking Using a HUD with Wearable RFID Verification"

International Symposium on Wearable Computers (ISWC)

Oct 2018 — Singapore

- Authors: Thomas C., **Panagiotopoulos T.**, Kotipalli P., Haynes M., Starner T.
- We tested our Google Glass - RFID setup against industry standards and found our method to be significantly faster and less prone to errors.

"Generation and Authoring of Augmented Reality Terrains Through Real-Time Analysis of Map Images"

Scandinavian Conference on Image Analysis (SCIA)

Jun 2017 — Norway

- Authors: **Panagiotopoulos T.**, Arvanitis G., Moustakas K., Fakotakis N.
- We developed a novel algorithm to recognize and segment a Contour Map.
- We designed an app allowing users to author Augmented Reality Terrains.

Interests

Augmented Reality | Game Design | Computer Vision & Graphics | Wearables | Symbiotic A.I. | Head Mounted Displays

Programming Languages

- Java
- C++, Python
- Obj-C
- Matlab, C#

Mobile Development

Android (70%) (30%) iOS

Awards

- Hackathon winner - HackGT 2018, Best Career Solution.
- School of Interactive Computing Travel Grant Sept. 2018.