

MICHAEL F. PÉREZ

michaelperez023@gmail.com | (954) 882-5069 | www.michaelperez.com | Gainesville, FL

EDUCATION

Ph.D. in Computer Science , GPA 3.60	August 2020 – Present
University of Florida	Gainesville, FL
Bachelor's in Computer Science , GPA 3.80	May 2020
Florida Polytechnic University	Lakeland, FL
Computer Science , 9 hours, GPA 4.0	May – August 2018
Broward College	Davie, FL
Computer Science , 48 hours, Computer Science GPA 3.92	September 2016 – January 2018
Columbia University, The School of Engineering and Applied Science	New York, NY

TECHNICAL SKILLS

Applications: MATLAB, Word, PowerPoint, Excel, Photoshop, Premiere, Audition, Blender, Android Studio, Microsoft Visual Studio, CMake, and LaTeX

Programming Languages: Java, C, Python, C#, C++, SQL, MATLAB, HTML, CSS, Javascript, Mathematica, CLIPS, VHDL, Mosel (Fico Xpress), Caffe, Bison, Yacc, Julia, and F#

Libraries: OpenCV, OpenAL, PyTorch, Tensorflow, Keras, Numpy, Scipi, Skikit-learn, Pandas, OpenGL, WebGL, Flutter, and Akka.NET

Operating Systems: Mac OS, Windows, Ubuntu, and Manjaro

Spoken Languages: Bilingual (Spanish and English)

PUBLICATIONS/CONFERENCES

- Oguzhan Topsakal, Mustafa Ilhan Akbas, Bria Smith, **Michael Perez**, Ege Can Guden, Mazhar Mehmet Celikoyar. "Evaluating the Reliability and Agreement of a Web-Based Facial Analysis Tool for Rhinoplasty", International Journal of Computer Assisted Radiology and Surgery. 16, 1381–1391 (2021)
<https://link.springer.com/article/10.1007/s11548-021-02423-z>
- Mazhar Celikoyar, **Michael Perez**, Mustafa Ilhan Akbaş, Oguzhan Topsakal. "Facial Surface Anthropometric Features and Measurements With an Emphasis on Rhinoplasty", Aesthetic Surgery Journal (2021), <https://doi.org/10.1093/asj/sjab190>
- Oguzhan Topsakal, Mustafa Ilhan Akbas, Bria Smith, **Michael Perez**, Ege Can Guden, Mazhar Mehmet Celikoyar. "Evaluating Intra and Inter Reliability of a Web-Based Facial Analysis Tool for Rhinoplasty," CARS 2021, Computer Assisted Radiology and Surgery (CARS) Conference (2021), <https://pubmed.ncbi.nlm.nih.gov/34146225/>
- Oguzhan Topsakal, Mustafa Ilhan Akbaş, Doga Demirel, Rafael Nunez, Bria Smith, **Michael Perez**, Mazhar Celikoyar. "Digitizing rhinoplasty: a web application with three-dimensional preoperative evaluation to assist rhinoplasty surgeons with surgical planning." Int J Comput Assist Radiol Surg. Nov;15(11):1941-1950. (2020)
- Oguzhan Topsakal, Mustafa Ilhan Akbaş, Doga Demirel, Rafael Nunez, Bria Smith, **Michael Perez**, Mazhar Celikoyar. "Digitizing Rhinoplasty: A web application for three-dimensional preoperative planning" In the Computer Assisted Radiology and Surgery (CARS) Congress (2020)

HONORS AND AWARDS

Graduate School Preeminence Award, University of Florida

September 2020 – Present

RESEARCH EXPERIENCE

Graphics, Imaging, and Light Measurement Lab

August 2020 - Present

CISE Department, University of Florida

Gainesville, FL

- Working on a research project that leverages adversarial approaches to model 3D motion and behavior from videos for applications in biomedical research
- Working under Dr. Corey Toler-Franklin's direction; Dr. Darragh Devine, from UF's psychology department, and Dr. Jörg Peters and Dr. Alper Üngör, from UF's CISE department, will also supervise my research

Rhinoplasty Research Group

May 2019 – May 2020

Computer Science Department, Florida Polytechnic University

Lakeland, FL

- Conducted a survey of over fifty research papers, documenting the facial landmarks and measurements relevant to the field of rhinoplasty, under the guidance of Dr. Mazhar Celikoyar, Dr. Oguzhan Topsakal, and Dr. Mustafa Akbas
- Collaborated with other students to develop a web interface for importing, exporting, and displaying feature point coordinates and measurements values onto 3D models of the human face

PROJECT EXPERIENCE

“Hermes Tracker App”

February - May 2019

Mobile Device Applications Class, Florida Polytechnic University

Lakeland, FL

- Collaborated with two other students to create a mobile app using Android Studio and Flutter; the app is cross-platform, working on both Android and Apple phones
- Designed the app to allow any organization that receives a large amount of mail to keep track of many daily operations including package tracking and delivery, letter tracking, and report generation using Google Cloud Firestore

“Escape the Maze – Mario Edition”

April - May 2019

Computer Graphics Class, Florida Polytechnic University

Lakeland, FL

- Developed an interactive graphical web application using WebGL, Javascript, and HTML
- Created a game in which the user has to escape a maze; there is a title menu, three levels, player options, enemies (animation simulated by using multiple sprite textures), projectiles, lighting, and sound effects

“Defecation Detecting Dog Trainer”

November 2019 - December 2019

Computer Vision Class, Florida Polytechnic University

Lakeland, FL

- Compared several deep neural networks using Caffe and OpenCV on a Raspberry Pi connected to a camera module and speaker
- The Pi is able to detect when a dog is present in the camera frame using pre-trained models; limitations in computer hardware and training data prevented me from training my own deep neural networks

“Car Sensor Cleaner”

October 2019 - May 2020

Senior Design Class, Florida Polytechnic University

Lakeland, FL

- Collaborated with other computer science and engineering students to create an autonomous vehicle sensor cleaner that cleans lovebugs off of vehicles using pressurized and heated water
- Applied the systems development life cycle and created all corresponding documentation but did not create the device because of the COVID epidemic

“Supervised Learning Approach to Pneumonia Characterization in Chest X-rays” |

September - December 2019

Machine Learning Class, Florida Polytechnic University

Lakeland, FL

- Collaborated with my group to compare the use of several classification models in the detection of pneumonia in chest x-rays
- Implemented the convolutional neural network using Keras

“Diet Tracking App”

January 2019 – May 2019

Software Engineering Class, Florida Polytechnic University

Lakeland, FL

- Collaborated with my team to design a mostly nonfunctional app that was meant to analyze pictures of nutritional information of food and record daily nutritional intake
- Applied the software development life cycle to this project and created all the appropriate documentation, including the Software Design Specification and Software Requirements Specification documents

WORK EXPERIENCE**Research Assistant**

Fall 2020 – Present

Graphics, Imaging, and Light Measurement Lab, University of Florida

Gainesville, FL

- Principal Investigator: Dr. Corey Toler-Franklin
- Perform research to advance various projects in the lab

Teaching Assistant

Summer 2021

Performant Programming in Python, University of Florida

Gainesville, FL

- Instructor: Jennifer “Ferby” Cremer
- Host weekly office hours and respond to student questions via email
- Perform all grading

Lead Teaching Assistant

Spring 2021

Operating Systems, University of Florida

Gainesville, FL

- Instructor: Dr. Sumi Helal
- Host weekly office hours, discussions and responds to student questions via email
- Plan and delegate all grading among team of nine teaching assistants and peer mentors

Teaching Assistant

Fall 2020

Deep Learning for Computer Graphics, University of Florida

Gainesville, FL

- Instructor: Dr. Corey Toler-Franklin
- Host weekly office hours and respond to student questions via email

Office Manager, Administrative Assistant

January 2018 – Present

Psychiatric Consultants, Inc.

Plantation, FL

- Manage all aspects of Dr. Sayonara Baez’s psychiatric practice, including scheduling appointments, processing patient inquiries, and accounting, remotely
- Expedite business workflows and streamline inefficiencies

Research Assistant

August 2019 – May 2020

Rhinoplasty Research Group, Florida Polytechnic University	Lakeland, FL
<ul style="list-style-type: none"> Performed research tasks under Dr. Oguzhan Topsakal 	
Student Educational Assistant	August 2019 – May 2020
Databases 1, Florida Polytechnic University	Lakeland, FL
<ul style="list-style-type: none"> Graded assignments and quizzes for Dr. Karim Elish's Database 1 class 	
Research Intern	June – August 2019
Rhinoplasty Research Group, Florida Polytechnic University	Lakeland, FL
<ul style="list-style-type: none"> Performed research tasks under Dr. Oguzhan Topsakal 	
Student Educational Assistant	July – August 2019
Software Engineering, Florida Polytechnic University	Lakeland, FL
<ul style="list-style-type: none"> Graded assignments and quizzes for Dr. Karim Elish's Software Engineering class 	
Tutor	February – August 2018
Huntington Learning Center	Pembroke Pines, FL
<ul style="list-style-type: none"> Tutored high school students in standard and advanced subjects such as calculus Tutored middle school students in basic algebra and geometry 	
Tutor	February – August 2018
Perez Tutoring and Test Prep	Plantation, FL
<ul style="list-style-type: none"> Tutored high school students primarily in STEM subjects in a private tutoring business 	
Lifeguard	July – August 2017
Camp Young Judea Sprout Lake	New York, NY
Lifeguard	September 2016 – January 2018
Dodge Fitness Center, Columbia University	New York, NY

REFERENCES

Dr. Corey Toler-Franklin, Assistant Professor
Computer and Information Science and Engineering Department
University of Florida, Gainesville FL
ctoler@cise.ufl.edu

Dr. Abdelsalam (Sumi) Helal, Professor; Fellow, IEEE, AAAS, IET; Member of Academia
Europaea
Computer and Information Science and Engineering Department
University of Florida, Gainesville FL
helal@cise.ufl.edu

Dr. Oguzhan Topsakal, Assistant Professor
Computer Science Department
Florida Polytechnic University, Lakeland FL
otopsakal@floridapoly.edu

Dr. Sayonara Baez, MD
Psychiatric Consultants Inc., Plantation FL
sbaezmd1@gmail.com