MICHAEL KASMAN
Undergraduate Researcher
Dallas, TX

mck.kasman@gmail.com ✉

linkedin.com/in/mckasman/

github.com/MCKasman

EDUCATION

B.S. Computer Engineering
The University of Texas at Dallas

August 2018 - Present   *Richardson, TX*

Calculus I, II, III • Differential Equations • Linear Algebra • Probability & Statistics • Computer Science I, II • Data Structures and Algorithms

WORK EXPERIENCE

Undergraduate Researcher
The University of Texas at Dallas

May 2019 - Present   *Richardson, TX*

Achievements/Tasks

- Researched the variance of human-centric metrics between virtual reality simulation and physical dry-lab exercises in robotic surgical training under Dr. Ann Majewicz Fey

- Pre-processed and analyzed data in a Linux environment using **Pandas** DataFrames, **Seaborn,** and **Pingouin** in **Jupyter** Lab to visualize analysis of variance **(ANOVA)**

- Publishing work to the Journal of Medical Robotics Research for special issue: Technology-enabled Tools for Clinical Skills Assessment

Clark Foundation Summer Research Scholar
The University of Texas at Dallas

June 2018 - August 2018   *Richardson, TX*

Achievements/Tasks

- Developed and administered a mobile indoors navigation app, Constellation, for the UT Dallas campus by collaborating with undergraduate researchers and principal investigator, Dr. Ravi Prakash

- Created **PHP** scripts to receive HTTP requests from the client and acquire the requested path coordinates and user location from **ArcGIS** and **Cisco CMX**

- Accomplished Constellation 1.0, measured by 50+ successful consecutive tests in navigating a path between rooms, through frontend and backend communication

Software Engineering Intern
S.T.E.A.M. Achievers

September 2017 - May 2018   *Dallas, TX*

Achievements/Tasks

- Frontend development using **HTML 5, CSS 3,** and **JavaScript** for the design and function of the S.T.E.A.M. Achievers Hackathon website

- Backend development using **PHP** and **SQL** to update the MySQL database and the upload of apps

- Educated 150+ participants, ages of 12 - 18 years old, to develop a web app in the web-development hackathon workshop

PUBLICATIONS

Kasman, M., Wang, Z., Martinez, M., Rege, R., Zeh, H., Scott, D., and Fey, A.M., "A Comparative Human-centric Analysis of Virtual Reality Simulation and Physical Dry Lab Exercises in Robotic Surgical Training," Journal of Medical Robotics Research. (under review)

SKILLS

Bootstrap   MySQL   OpenCV   Cloud

Linux   Pandas   Matplotlib   NumPy

SciPy   LaTeX   Keras   Tensorflow

HTML 5/CSS 3	**Proficient**
Python	**Intermediate**
PHP	**Intermediate**
JavaScript	**Intermediate**
Java	**Intermediate**
C/C++	**Intermediate**

PROJECTS

Flare ↗
- A React Native mobile application that analyzes the victim density level after a natural disaster from drone/bird-eye viewed images using deep learning

Constellation Mobile Indoors Navigation App ↗
- An Android mobile indoors navigation app capable of location tracking and path-finding between rooms on the UT Dallas campus

Smart Rates ↗
- A React Native mobile and web app that analyzes the real-time market suggested retail price of cars using the **Smart Car API**

FastPass ↗
- A React Native mobile app that verifies the boarding pass information of American Airlines passengers through the **Microsoft Azure Facial Recognition API**

EagleEye ↗
- A React Native mobile app that notifies government officials about infrastructure issues

ACHIEVEMENTS

2017 cPanel & FreeCodeCamp Hackathon 1st Place
Awarded 1st Place for the best mobile app, GreenView, out of 50+ other competitors

2017, 2015, 2014 Dallas BEST Robotics Engineering Design Award
Awarded for the best robotics engineering and programming design among 40+ other schools

Better World Fund & UNA-USA Thank a Peacekeeper (TAPK) Campaign Award
Awarded a grant for heading the TAPK campaign at the Dallas Area Model United Nations Conference: delivered 300 complete TAPK cards