

# MAI BUI

buim@cua.edu · maipbui.github.io

## EDUCATION

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**The Catholic University of America**, Washington, D.C., USA

Jan 2018 – Dec 2020

**Bachelor of Science in Computer Science, Minor in Mathematics and Data Analytics**

GPA: 3.77/4.0

Relevant Coursework: Data Structures, Machine Learning, Data Analytics, Software Engineering, Web Programming.

## WORK EXPERIENCE

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**The Catholic University of America**, Washington, D.C., USA

**Web Specialist**

May 2018 - Present

- Used Cascade Server CMS to develop new content and workflow on the website to ensure highest quality.
- Implemented campaign emails, collected leads' data, and provided weekly reports on Salesforce.
- Managed daily social media across several platforms to meet group's advertising goals.

**Rehabilitation Engineering Research Center DC**, Washington, D.C., USA

**Research Intern**

May 2019 – Aug 2019

- Utilized deep learning and Intel Realsense SDK to assess the development of hand grasp and predict future outcomes in infants at risk for motor delay.
- Collected and recorded home-based data with several participants for later assessment and analysis.
- Collaborated with a group of researchers to deliver outstanding results on multiple projects by performing exceptional research, communication, and project-management skills.

## PROJECTS

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**Autonomous Driving Robot**

Aug 2019 – May 2020

- Developed an autonomous robot using NVIDIA Jetson Nano board and Raspberry Pi Camera.
- The robot is capable of avoiding obstacles, keeping track of the lane lines, and recognizing determined traffic signs.
- Deep learning frameworks: PyTorch, Tensorflow.

**Home assessment of grasp development in infants at risk for fine motor delay**

May 2019 – Aug 2019

- Assessed spontaneous hand use using video capture (Intel Realsense D435) and interactive grasp force with instrumented toys in infants
- Signaled potential avenues for early interventions to encourage object exploration and functional hand use.
- Performed different deep learning approaches: DeepLabCut, OpenPose, Deep High Resolution HRNet.

## TECHNICAL SKILLS

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**Programming Languages** Python, Java, R, C/C++, MATLAB

**Web Programming** HTML, CSS

**Frameworks/Libraries** NumPy, Matplotlib, scikit-learn, pandas, PyTorch, Tensorflow, PyQt

## CERTIFICATES

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Intro to Machine Learning with Tensorflow, Udacity

Machine Learning, Stanford University, Coursera

Intro to Self-Driving Cars, Lyft, Udacity

## HONORS & AWARDS

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Grace Hopper Celebration of Women in Computing Scholarship

2020

Pope Francis Engineering School Scholarship in Catholic University

2018 - Present