

MAI BUI

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EDUCATION

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

Jan 2018 – Dec 2020

B.Sc. in Computer Science, Double Minor in Mathematics and Data Analytics

GPA: 3.77/4.0

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

WORK EXPERIENCE

Medstar National Rehabilitation Network, Washington, D.C., USA

Engineering Intern

Aug 2020 - Present

- Working on EEG signal processing, developing data acquisition, and writing Matlab scripts for neurorehabilitation research.
- Utilizing data analysis and interpretation methods to the neurophysiology of stroke recovery.

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

Web Specialist

May 2018 - Present

- Using Cascade Server CMS to develop new content and workflow on the website to ensure highest quality.
- Implementing campaign emails, collected leads' data, and provided weekly reports on Salesforce.
- Managing 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.
- Collaborated with a group of researchers to deliver outstanding results on multiple projects by performing exceptional research, communication, and project-management skills.
- Collected and recorded home-based data with several participants for later assessment and analysis.

PROJECTS

Autonomous Driving Robot

Aug 2019 – May 2020

- Developed an autonomous robot using NVIDIA Jetson Nano board and Raspberry Pi Camera.
- The robot can avoid obstacles, keep track of the lane lines, and recognize 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 & functional hand use.
- Performed different deep learning approaches: DeepLabCut, OpenPose, Deep High Resolution HRNet.

TECHNICAL SKILLS

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

Web Programming HTML, CSS

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

CERTIFICATES

Intro to Machine Learning with Tensorflow, Udacity

Machine Learning, Stanford University, Coursera

Intro to Self-Driving Cars, Lyft, Udacity

HONORS & AWARDS

Grace Hopper Celebration of Women in Computing Scholarship

2020

Pope Francis Engineering School Scholarship in Catholic University

2018 - Present

Dean's List

2018 – Present