# WILSON A. MCDADE

# PROJECTS

## Bits n' Bytes: Al and Sensor Driven Smart Store - Project Management, Python, Kivy, YOLOv5, MQTT

rit.edu/imagine/exhibits/bits-n-bytes-ai-and-sensor-driven-smart-store | AUG 2023 - Current

- Managed a multidisciplinary team of 12 students to design and produce a prototype smart store for exhibition at ImagineRIT, a university-wide science fair
- Built a smart store using computer vision to identify classes of products and weight sensors to further ascertain which product has been taken

#### Tunnelvision - An Interactive Catalog of RIT's Murals - Python, PIL, PostgreSQL, Flask

tunnelvision.csh.rit.edu | OCT 2023 - Current

- Built SQL schema to store murals, photo references, and other attributes
- Added search functionality using PostgreSQL builtin functions
- · Worked with RIT departments to collect records on the murals in the RIT residence hall tunnels

# EDUCATION

#### Rochester Institute of Technology – Bachelors – CS Major, Student Life Award Recipient

AUGUST 2019 - EXPECTED GRAD DEC 2024

## **EXPERIENCE**

#### Bryx Inc – Firmware Engineer, R&D Engineer Co-op

MAY 2022 - JUN 2023

- Implemented REST API for custom embedded device using C++
- Researched possible new products and integrations, built prototypes
- Developed webapp for dynamically controlling, updating, and debugging embedded platform

### C-Speed LLC – Computer Science Co-op

AUG 2021 - DEC 2021

- Performed testing and verification working through Microsoft Azure TFS
- Maintained and added features to a Bing Maps GIS app and employed resource efficient algorithms to manage large amounts
  of data

## ACTIVITIES

#### **Computer Science House at RIT** – Member, Research and Development Director

csh.rit.edu | JAN 2022 - MAY 2023 (R&D Director) | AUG 2019 - Current (Member)

- Worked with RIT and alumni to secure a donation of thirteen 3D printers for use in our project room
- Found compromises with different RIT departments to allow some types of hot work in our work rooms
- Led multiple successful collaborative efforts including our ImagineRIT '22, ImagineRIT '23 and Devcade projects

#### **Engineers for a Sustainable World at RIT** – Member

campusgroups.rit.edu/esw | JAN 2023 - Current

• Contributed to multiple upcoming projects including a aquaponic vegetable farm and a 3D printing recycling program

## SKILLS

Java	C#	С	++	Python	С	PostgreSQL
Linux	Problem Solving			Communication		Soldering
AGILE	HTML	JS	MIPS	Pandas	PyTerrier	Git