

Mapendo Pierre

github.com/mapendopndc

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mapendopndc.io

Skills | C# • Java • Javascript • Node.js • React.js • HTML/CSS • Python • Grasshopper • Dynamo

experience

Ledcor

Virtual Construction Services (VCS) Coordinator

Toronto, Ontario

Sept 2019 - Dec 2019

- Led implementation of multi-user **VR** environment to facilitate mock-up reviews in **Unity** and **C#**
- Automated area/volume calculations with **Dynamo** saving estimating team hours every week
- Recorded on-site **LIDAR scans** and analyzed 3D **point cloud models** for construction accuracy
- 400+ hrs modelling commercial/residential buildings with **Revit** from plans and specifications

Humber College

Instructional Technology Assistant — Full Stack

Toronto, Ontario

Jan 2019 - Apr 2019

- Single-handedly developed a full-stack **React.js** web app to streamline data collection in 4 weeks
- Applied **UDL** principles to build an **AODA** compliant and **responsive** iPad front-end for data entry
- Created compelling visual reports using **Google API** to inform departmental decisions
- Offered workshops to introduce new classroom technologies to school faculty

TekWorthy

Software Developer — Front End

Ottawa, Ontario

Jan 2015 - March 2015

- Digitalized visuals into interactive web pages using **HTML/CSS** to enhance client web presence
- Honed impeccable **time-management** skills to handle strict deadlines with high code standards

projects

Holospace

Jun 2020

- Built multi-user **AR** app in Unity and a website with React.js for collaborative 3D mock-up reviews
- Deployed **Node.js REST API** to communicate with **MongoDB**, **AWS S3**, mobile and web clients
- Configured **NGINX reverse proxy** to implement **microservice** architecture and **virtual hosting**
- Secured sensitive API routes using **JWT** authentication, **bcrypt** hashing, and **SSL** certification

Boid Simulation

May 2020

- Wrote a Grasshopper plugin in **.NET** with **C#** to simulate flocking patterns using boid algorithms
- Sped up run time of simulations by using R-Tree **data structures** to store geometric data
- Developed and debugged program in **Visual Studio** using **Git** for version control

education

University of Waterloo

Architectural Engineering Class of 2023

- 3.75/4.00 cGPA

achievements

2020 *Libgen* Library Design Competition Shortlist

2018 *TimberFever* Competition Winner - \$1500

2018 *Merits* Entrance Scholarship - \$1000