

AWARDS

- Top 3 Engineering Thesis Projects (2021)
University of Wollongong
- Most Popular Display 3rd Year Engineering (2019)
University of Wollongong
- Most Popular Display 2nd Year Engineering (2018)
University of Wollongong
- UOW Engineering and Information Science
Award for Excellence in Technology and
Applied Studies (2016)
University of Wollongong & Chevalier College

DEV STACK

- Python
- C++
- Linux (Debian, Ubuntu)
- CI/CD (GitLab, Github)
- Virtualisation (VMware)
- Management Tools (Redmine, Taiga)
- Operating Systems (macOS, Linux, Android, Windows)

INTERESTS

-  ————— Video Games
-  ————— Programming
-  ————— Hobby Electronics
-  ————— Geocaching
-  ————— Marvel Movies
-  ————— Cooking

REACH OUT



My Website



Book a Chat

PAST PROJECTS

NAVIGATIVE ASSISTIVE DEVICE

Developed a prototype embedded navigative assistive device that utilised neural networks and machine learning for guiding blind individuals through unseen and hazardous environments.



SHOOSH

Worked in a team of 6 to develop a video game in a short time period for a university project. My focus was on game programming, including physics, gameplay elements, artificial intelligence, and writing custom shaders.

```
20 // Update is called once per frame
21 void Update()
22 {
23     // Send out raycast
24     if (Physics.Raycast(transform.position, transform.forward, out hit, 2))
25     {
26         // If raycast hits an object that can be picked up
27         if (hit.collider.gameObject.tag == "Pickupable")
28         {
29             // Show interaction text
30             interactText.SetActive(true);
31
32             // If mouse held down
33             if (Input.GetMouseButton(0))
34             {
35                 // Only allow one object to be picked up at once
36                 if (held)
37                     return;
38
39                 // Pick up object and make kinematic
40                 hit.collider.gameObject.transform.SetParent(this.gameObject.transform);
41                 pickupRb = hit.collider.gameObject.GetComponent<Rigidbody>();
42                 pickupRb.isKinematic = true;
43                 pickupRb.collisionDetectionMode = CollisionDetectionMode.ContinuousSpeculative;
44                 held = true;
45             }
46         }
47     }
48 }
```

FAVORITE TECHNOLOGIES



Unity



Python



C++



Visual Studio



Unreal



VMware

REFERENCES



Pauline Pounds

Assoc. Prof. of Mechatronics

University of Queensland

E : pauline.pounds@uq.edu.au

A : Level 4, Bld 78, Staff House Rd
St Lucia, QLD 4072



Jack Darcy

Lead SIA

IBM

E : jack@jackdarcy.com.au

A : 348 Edward St
Brisbane City, QLD 4000