

ISR Lab Video Transcript

:00

[Music]

0:00

foreign

0:05

lab the intelligence and system robotics

0:08

lab here at UWF Pensacola Florida in

0:12

here this is where we essentially this

0:14

is where the robotic magic happens in

0:16

the rsr lab it's mostly connected as

0:17

well to ihmc with the resource team and

0:19

development we just basically take those

0:22

three parts of the engineering and we

0:23

apply them to real life situations or on

0:25

research for things like aerial drones

0:28

or anything biomechanical that can be

0:29

applied to a real life I've learned a

0:32

lot about autonomous robots and and just

0:35

learning how robots move how we're able

0:37

to use science and math and physics and

0:41

things like that to like simulate and

0:43

emulate

0:44

real life motion and things like that

0:47

here what I'm working on in the ISR lab

0:49

is I'm working on a simulation that is

0:53

dealing with a quad rotor a UAV the

0:56

acronym stands for the unmanned aerial

0:58

vehicle and from there I am supposed to

1:01

simulate the AV to Target a specific
1:05
object so right now I'm working on a
1:07
project with a robot called The Jet hexa
1:10
and I'm using the robot to detect tennis
1:13
balls so it's he's a ball if it's a
1:15
circular shape it's yellow it says the
1:17
tennis ball and then you have to run
1:19
algorithms and stuff to make sure it
1:21
actually is a tennis ball and then the
1:23
robot will move to align itself with it
1:26
so right now I'm working on a quadruped
1:29
robot it essentially it has a lidar
1:31
sensor and then a webcam in front of it
1:33
it essentially Maps out an entire room
1:35
and then I can either plan a single path
1:37
or a couple of waypoints and the robot
1:40
will generate a simulation to where it
1:42
finds the quickest and most efficient
1:43
route to get there without running into
1:45
any obstacles it can be it can be
1:48
intimidating at first so for me I had no
1:51
experience with robotics coming in it
1:53
definitely makes you think differently
1:55
because you're applying all these
1:56
courses into One Singular action so you
1:59
have all the math you have all the data
2:01

analytics you have the mechanical and
2:03
electrical aspects of it and then you
2:05
have to think and then make your thought
2:08
process go into fixing this problem
2:10
solving it rather than just putting all
2:12
these pieces together and hoping that
2:13
the outcome comes out perfectly and you
2:16
just have to take time and you have to
2:17
have patience and you have to do a bunch
2:20
of trial and error and no matter how
2:22
many errors you get you just have to
2:24
keep going and there's a lot of useful
2:27
resources and helpful staff and students
2:30
who are willing to help you we have each
2:32
other to ask questions because all of us
2:34
are going through the same thing or have
2:35
been struggling with the same problems
2:37
so having each other is definitely the
2:39
number one like resource for each other
2:42
so when I think about who I was as a
2:44
freshman I was someone who didn't really
2:46
like branching out or reaching out for
2:49
opportunities but I found as I got older
2:52
that the best opportunities for me the
2:55
ones where I grew the most were the
2:57
opportunities that I sought after myself
2:59

so reaching out to faculty members

3:02

talking to different people to different

3:05

classmates those were the the times when

3:09

I had to really stretch and grow and

3:12

develop skills that

3:14

made me a better student a better person

3:17

a better roboticist all the above so I

3:20

would definitely recommend reaching out

3:22

and trying to find your own

3:24

opportunities