

Sterling McLeod

<http://webpages.uncc.edu/smcleo12>
smcleo12@uncc.edu

EXPERIENCE

UNC CHARLOTTE | LECTURER

August 2018 -- Present | Charlotte, NC

- Designed and taught courses on artificial intelligence, robotics, and introduction to computer science
- Mentored undergraduate students on senior projects involving robot motion, self-driving cars, and computer vision

UNC CHARLOTTE | PH.D. STUDENT

August 2013 – May 2019 | Charlotte, NC

- Performed literature reviews on real-time robot motion planning, task constrained motion planning, real-time perception of moving obstacles, and software testing in robotics
- Designed and implemented algorithms to perform non-holonomic real-time motion planning in the presence of unknown obstacles with unforeseen motion
- Designed and implemented a framework for system-level software testing on a real-time motion planning system
- Published papers on my work in high-quality conferences and journals
- Collaborated with industry partners to implement work on industry robots

AXIS FOOTBALL GAME | SOFTWARE DEVELOPER

June 2017 – June 2018 | Charlotte, NC

- Designed and implemented NPC AI techniques for 2017 and 2018 releases
- Implemented GUI to display player stats during gameplay for 2017 release
- Implemented new music management module for 2017 release

COROWARE | ROBOTICS ENGINEER

Dec. 2012 – July 2013 | Charlotte, NC

- Developed Android and Linux apps for a 4-wheel differential drive mobile robot
- Built small 4-wheel differential drive robots to order for clients

CHEMRING DETECTION SYSTEMS | SOFTWARE ENGINEERING INTERN

Dec. 2012 – July 2013 | Charlotte, NC

- Developed software for Joint Biological Tactical Detection System (JBTDs)
- Implemented features and unit tests for C# modules on remote file transfer, GPS, and biological data streaming
- Updated approximately 80 UML Class and Sequence diagrams

EDUCATION

PH.D. COMPUTER SCIENCE

UNIVERSITY OF NORTH CAROLINA
 CHARLOTTE

Awarded 2019

Dissertation: Robust and Reliable
 Real-time Adaptive Motion Planning
 Advisor: Jing Xiao

M.S. COMPUTER SCIENCE

UNIVERSITY OF NORTH CAROLINA
 CHARLOTTE

Awarded 2014

B.S. COMPUTER SCIENCE

UNIVERSITY OF NORTH CAROLINA
 CHARLOTTE

Awarded 2012

LINKS

Website:// smcleo12

Github:// [sterlingm](https://github.com/sterlingm)

LinkedIn:// [sterling-mcleod](https://www.linkedin.com/in/sterling-mcleod)

Google Scholar:// [Sterling McLeod](https://scholar.google.com/citations?user=...)

SKILLS

LANGUAGES

C/C++ • Python • C# • Java • \LaTeX
 Matlab • JavaScript • Bash

TOOLS

ROS • Linux • MSVS • Unity • Git
 Gazebo • Unreal • OpenSceneGraph