

David Newberry

Software Engineer - NLA Diagnostics

Charlotte, NC - Email me on Indeed: [indeed.com/r/David-Newberry/d613c090a0bc5772](https://www.indeed.com/r/David-Newberry/d613c090a0bc5772)

Willing to relocate to: Raleigh-Durham, NC
Authorized to work in the US for any employer

WORK EXPERIENCE

Software Engineer

NLA Diagnostics - January 2016 to Present

- Design and implement architecture level changes to software and firmware.
- Design and implement new features from the ground up.
- Develop Java application software and XML layouts.
- Design calibration processes that utilize large sets of test data.
- Develop firmware for multiple processors in C.
- Instantiated proper GitHub version control.
- Manage development and deployment GitHub branches.
- Generate comprehensive documentation on software and hardware.

Graduate Researcher

NCSU - August 2014 to December 2015

- Assistant to Dr. Rhett Davis.
- Create automation/parsing Python scripts to perform more tedious testing.
- Primarily analyze and simulate heat transfer through DAHI technologies.
- Design transistor layouts in DAHI technologies on Virtuoso.

EDUCATION

B. S. in Computer Engineering

North Carolina State University - Raleigh, NC
December 2015

ADDITIONAL INFORMATION

Skills

- Application Development: Proficient with Java. Very comfortable in a Linux development environment. Experience with Python. Experienced in architecture level design.
- Firmware Development: Fluent in C. Embedded Linux experience with Beaglebone Black.
- Experience programming for 4+ different microprocessors using an ARM architecture.
- Robotics: Experience with forward and inverse kinematics in a class environment.

Projects

- Senior Design Self Driving Car Navigation System
- Lead programmer. Designed and programmed the main navigational algorithm.
- Designed overall system.
- Used Beaglebone Black and C programming for navigation algorithm.

Achievements and Interests

Design Day First Place for Tech Demo

Final Design Day Second Place in Localization and Mapping Category