

DAVID HOFFMAN

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SUMMARY

Computer/Electrical/Software Engineer with diverse skillset including experience in software, robotics, wireless, radar jamming, battery testing, and electronics testing. Software interests include machine learning, image processing, and data analytics. Interested in the following fields: data analytics, financial markets, defense, energy, robotics, cloud, and automotive. Soft skills include leadership and project management.

EDUCATION

Master of Science in Software Engineering **May 2017**
East Carolina University, Greenville, NC

Bachelor of Science in Computer Engineering and Bachelor of Science in Electrical Engineering **May 2011**
North Carolina State University, Raleigh, NC

Relevant Course Work:

Machine Learning, Parallel Processing, Software Architecture, Software Construction, Software Project Management, Software Testing, Software Modeling & Analysis, Software Security Engineering

COMPUTER SKILLS

Software:	Python, C, TCL, Java, R, Bash, LabVIEW	Linux:	Ubuntu, Debian, CentOS, RHEL, SUSE
Image Processing:	OpenCV, skimage	Databases:	MySQL, Oracle, MongoDB
Machine Learning:	Keras, Theano, sklearn, R	Tools:	IntelliJ, PyCharm, JIRA, Crucible, FishEye, Rational
Cloud Computing:	Hadoop, AWS		Software Architect, SVN, Git, UML

ACADEMIC EXPERIENCE

Graduate Research Assistant: East Carolina University, Greenville, NC **2016 - 2017**

- **Award:** 2016-2017 Outstanding Computer Science Graduate Student
- **Teaching:** Taught Discrete Mathematics to a 60-person class during Fall 2016 semester
- **Publications:** 2 publications accepted to MDA 2017 and ICCS 2017
- **Research:** data analytics, machine learning, and image processing. Utilize Hadoop, Python, OpenCV, AWS

President: Underwater Robotics Club: North Carolina State University, Raleigh, NC **2007 - 2011**

- President 2010-2011, Treasurer 2008-2010
- Designed submersible robot that navigates with vision, SONAR, and an array of sensors to complete an underwater obstacle course autonomously. Improved placement at annual competition (2008-33rd, 2009-28th, 2010-17th, to 2011-9th)

Senior Design: North Carolina State University, Raleigh, NC **2011**

- Designed and implemented a successful stereo computer vision system with C and OpenCV

PROFESSIONAL EXPERIENCE

Contributor to PylmageSearch.com **2017 - present**

- Author (ghost) of image processing/computer vision tutorials
- Upgrade PylmageSearch Gurus course content (over 2,161 pages) from Python 2.7/OpenCV 2.4 to Python 3.6+/OpenCV 3.1+
- Planning stages for authorship of computer vision for Raspberry Pi book

Software Developer and System Integrator: Molex High Performance Datacenter Cables, Little Rock, AR **2014 - 2016**

- Developed and supported global copper datacenter cable test software for 4 world wide manufacturing plants
- Designed software and hardware for an embedded Linux automotive system. Test board consisted of a BeagleBone Black development board with cellular cape
- Utilized Python, TCL, and C programming languages

Wireless/Radar System Engineer: Northrop Grumman, Cherry Point, NC & Virginia Beach, VA **2011 - 2014**

- Provided Navy/Marine Corps' East Coast Combined Tactical Training Ranges with systems level engineering on voice radios, cellular networks, IP networks (classified and unclassified), microwave data links, and electronic warfare equipment
- Designed and implemented software in Python and LabVIEW for radar jamming and SCADA

Co-op Electrical Engineer: Superior Controls, Raleigh, NC **2010 - 2011**

- Developed LabVIEW and PLC software for transmission gear test machines
- Utilized AutoCAD for electrical design, electrical panel and machine wiring

Co-op Electrical Engineer: Sony Ericsson Mobile Communications, Raleigh, NC **2008 - 2009**

- Designed and implemented test system software with LabVIEW
- Conducted battery charge performance, current consumption, and charge algorithm testing on cellular phones
- Conducted RF verification with test equipment after phones experienced semi-destructive mechanical testing

CERTIFICATIONS and MEMBERSHIPS

IEEE: Institute for Electrical and Electronics Engineers **2007 - present**

PylmageSearch Gurus Graduate Certification # 13989477 **2017 - present**

Central Arkansas Venture Center, Little Rock, AR **2015 - 2016**

Create Little Rock—Little Rock Chamber of Commerce Young Professionals, Little Rock, AR **2015 - 2016**

Molex Young Professionals Group, Little Rock, AR **2015 - 2016**