

N. Cameron Matson

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EDUCATION: **Southern Methodist University, Lyle School of Engineering**, Dallas, TX Grad Date: Dec. 2017
Bachelor of Science in Electrical Engineering GPA: 3.95
Minor in Computer Science

Dedman College of Humanities and Sciences Grad Date: May 2017
Bachelor of Science in Mathematics GPA: 3.95

Meadows College of the Arts Grad Date: May 2017
Bachelor of Arts in Music GPA: 3.95

University College, Oxford University, Oxford, England (SMU study abroad program) Summer 2014

EXPERIENCE:

Texas Instruments, Product Development and Test Intern Summer 2017

- Wrote a .NET software application to automate the capture, analysis, and verification of specialized, critical internal control signals via an edge detection and clustering algorithm for the DLP technology.

L-3: Mission Integration Division, Hardware Product Development Co-op Summer 2016, Summer-Fall 2016

- Responsible for designing and implementing hardware/software functional test of military black box units
- Use lab equipment to check out, troubleshoot, and debug various units

SMU Residence Life and Student Housing, Residence Assistant Fall 2014 – Spring 2017

- Oversee 30 residents and serve as a link between them and SMU to create a living learning community
- Resolve resident conflict and interact with proper SMU channels to provide resources

Learning Enhancement Center, Tutor (Math, EE, Computer Science) 2015 – Present

Matson Inc. (General Contractors), Laborer Summer 2013, '14

ACADEMIC PROJECTS:

- Designed a tool to identify and describe buildings present in Google Earth images using a neural net and OpenCV (Sr. Design 2017)
- Wrote an algorithm which uses a combination heuristics and probabilities to pronounce unknown words (2017)
- Created a search engine with XML document parsing, Boolean querying, term frequency-inverse document frequency relevancy ranking, and a persistent inverted file index (2016)
- Developed an Android application to sample and process vibrations to be used in part of a research project that leverages crowd sourcing to detect and characterize frequency responses of bridges (2016)
- Member of preliminary team looking into research related to Digital Short Range Communication Protocol for Vehicle to Vehicle Communication (2016)
- Implemented a floating point signal processor to perform demodulation, convolution, and decoding of a signal using ARM (2015)

PERSONAL PROJECTS

- SpitBot: A rap algorithm, trained on a corpus of existing rap lyrics, that responds to input with rap lyrics that rhyme and have a predetermined rhythm.
- Poboy: An automated light switch control module based on an ESP8266 controllable through a web interface.

COURSES: Machine Learning, Algorithms, Random Processes, Wireless Optimization, Data Structures, Mobile Phone Embedded Design, Embedded System Architecture, Solid State Devices, Discrete Signal Processing, Scientific Computing, Statistics for Engineering, Linear Algebra, Matrix Computation

SKILLS: Python, C++, C, C#, MatLab, OpenCV, SQL, ARM, Android, LabView, Linux, NodeJS, HTML/CSS/JS, MS Windows/Office

ACTIVITIES: Student IEEE, Tau Beta Pi, Engineers w/o Borders, Lyle Ambassador, Tunes for Texas, Club Soccer

AWARDS: Eagle Scout, SMU Second Century Scholar, Engineering Fellows Scholar

INTERESTS: Backpacking, Soccer, Music, Scuba diving