N. Cameron Matson

Southern Methodist University
Department of Electrical and Computer Engineering
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1. EDUCATION

Present — **Master of Science in Electrical Engineering**, Southern Methodist University, Dallas, TX
Advisors: Dr. Joseph Camp, Dr. Dinesh Rajan
Anticipated Graduation: Spring '21
GPA: 4.00/4.00

2017 — **Bachelor of Science in Electrical Engineering,** Southern Methodist University, Dallas, TX
Minor in Computer Science
Bachelor of Science, Southern Methodist University, Dallas, TX
Major: Mathematics
Bachelor of Arts, Southern Methodist University, Dallas, TX
Major: Music
GPA: 3.85/4.00, Cum Laude

2. PROFESSIONAL EXPERIENCE

Present — **Southern Methodist University**, *Dallas, TX*
Department of ECE, Wireless Research Group, Research Assistant
Fall '21 — Teaching Assistant, Intro to Wireless Communication

Summer '21 — **Griffiss Institute**, *Rome, NY*
Research Intern

2017 – 2020 — **Texas Instruments**, *Dallas, TX*
Feb. '19 – Oct. '20 — *Battery Gauge Products,* Firmware Validation Engineer
Feb. '18 – Feb. '19 — *High Reliability Products,* Product and Test Engineer
Summer 2017 — *DLP (Digital Light Projection) Products,* Test Engineering Intern

Summer '16 & Summer – Fall '15 — **L3 Communications,** *Greenville, TX*
Hardware Product Development Intern, Co-op

2014 – 2017 — **Southern Methodist University,** *Dallas, TX*
Resident Life and Student Housing, Resident Assistant
Altshuler Learning Enhancement Center, Tutor

Youth — **Matson Inc. (General Contractors)**, *Little Rock, AR*
Laborer, Son

3. SKILLS

MATLAB, Python, C++, Linux, Machine Learning tools (TensorFlow, Keras, PyTorch), Software-Defined Radio (USRPS), GNU Radio, NI LabView/TestStand, Wireless Networks, Computer Vision, Image Processing, Lab Bench Testing, Experiment Design

4. RESEARCH

I. Topics

1. Air-to-air channel measurements and applications
2. Machine learning applications to wireless systems

II. Conference Publications

2022 M. Badi, **N. C. Matson**, D. Rajan, J. Camp, "Leveraging UAV Rotation To Increase Phase Coherency in Distributed Transmit Beamforming." to appear at IEEE CCNC.

2021 **N. C. Matson**, M. H. Syed, S. Song, D. Rajan, and J. Camp, "Effect of Antenna Orientation on the Air-to-Air Channel in Arbitrary 3D Space." IEEE WoWMoM 3rd Workshop on Wireless Networking, Planning, and Computing for UAV Swarms (SwarmNet).

5. SELECTED COURSES TAKEN

2021 Advanced Information Theory, Machine Learning and Neural Networks, Cryptography and Data Security, Statistical Pattern Recognition

2020 Advanced Drone Communications, Adaptive Algorithms for Machine Learning, Embedded Wireless Design Lab, Fundamentals of Computer Vision

2017 Algorithms, Optimization in Wireless Networks, Matrix Computation, Antenna and Radiowave Propagation, Communication and Information Systems, Machine Learning in Python, Topics in Digital Signal Processing

2016 Mobile Phone Embedded Design, Data Structures, Electromagnetic Fields and Waves, Microcontroller Architecture, Scientific Computing, Linear Algebra, Solid State Devices, Statistical Methods in EE

6. HONORS AND AWARDS

2021 SMU Research Days Competition Winner – ECE Category

2017 Pi Kappa Lambda (music honors society)

2015 Alpha Chi (academic honor society)

2014 Tau Beta Pi (engineering honors society)

2013 SMU Second Century Scholar
SMU University Honors Program
Eagle Scout