

Joseph P Robinson

3rd year PhD Candidate for Yun Fu of SMILE Lab. Focus: applied machine learning with emphasis on computer vision.

Education

2014–Now **PhD in Computer Engineering**, *Northeastern University*, Boston, MA.

AWARDS

- ALERT DHS STEM Career Development & Research Fellowship (09/14–09/17)
- ASL4GUP Travel Grant for 2017 IEEE FG (04/01)

ACTIVITIES

- Computational Methods for Data Analysis, *Part-Time Faculty* (01/18–05/10)
- Recruit, interview, hire undergraduates, *Student & Payroll Manager* (01/15–Now)
- 2017 New England Computer Vision workshop, *Workshop Organizer* (10/17)
- Gordon Scholar Program, *Student Mentor* (09/14–Now)
- Student Research Engagement Committee, *Secretary* (09/15–Now)
- Student Research Engagement Committee, *Research Ambassador* (05/14–09/15)
- Dean's Achievement Award (6 semesters)

RELATED COURSES

- Advanced Computer Vision
- Advanced Machine Learning
- Natural Language Processing
- Assistive Robotics
- Parallel Processing for Data Analytics
- Pattern Recognition
- 2D Signal and Image Processing
- Human-Computer Interaction
- GPGPU Computing
- Applied Prob & Stochastic Proc

2011–2014 **BS, Electrical & Computer Engineering**, *Northeastern University*, Boston, MA.

AWARDS

- ECE Department winner for Senior Capstone Competition, 1st Place (05/14)
- Northeastern University's 'Huntington 100' (04/14)
- CDSP Research Workshop Award for Best Poster (03/14)
- IEEE and ECE Department Winner for T-shirt Design Contest (03/14)
- SGA's Senator of the Month (09/13)
- Outstanding Student Research in Engineering and Technology, RISE 2012 (03/12)

- ECE Department winner for remote control circuit design (05/11)
- Investing in Tomorrow's Engineering Leaders (ITEL) Scholarship, NSF
- Dean's Achievement Award (6 semesters)

SENIOR CAPSTONE

- Designed and built a semi-autonomous tunnel inspection robot for MassDOT that allows tunnel inspections to be done from a PC back at the office.
- Main contributions were in the interfacing (components, GUI), communications (live media streaming, system controller, camera controls), image processing, Raspberry Pi configuration, database design.
- Won 1st in Electrical & Computer Engineering Department Capstone competition.

ACTIVITIES

- SMILE Lab, *Undergraduate Research Assistant* (01/14–04/14)
- IEEE Student Chapter at NU, *President* (12/13–05/14)
- Student Research Engagement Committee, *Research Ambassador* (10/12–05/14)
- Gordon Scholar Program, *Student Mentor* (01/12–04/14)
- Optical Science Lab, *Undergraduate Research Assistant* (07/10–12/13)
- Student Government Association, *Senator* (09/12–12/13)
- IEEE Student Chapter at NU, *Student Activities Representative* (08/12–12/13)
- Introductory Engineering, *Peer Mentor* (09/11–12/13)
- Gordon Leadership Bootcamp, *Student Speaker* (02/12–15/12)

RELATED COURSES

- | | |
|-------------------------------------------|--------------------------------------|
| ○ Computer Vision | ○ Data Visualization |
| ○ Digital Image Processing | ○ Robotics |
| ○ Communication Systems | ○ Capstone I and II |
| ○ Electromagnetic Fields and Waves | ○ Computer Architecture |
| ○ Circuits; Electronics I & II | ○ Noise & Stochastic Processes |
| ○ Computer & Telecom. Systems | ○ Optimization Methods |
| ○ Differential Equations & Linear Algebra | ○ Linear Systems |
| ○ Algorithms & Data Structures | ○ Discrete Math |
| ○ Advanced Writing in Tech Professions | ○ Problem Solving & Computation |
| ○ Engineering Design | ○ Professional Issues in Engineering |

2008–2010 **A.S., Engineering Science**, *Northern Essex Community College*, Haverhill, MA.

AWARDS

- Certificate of Distinction for Emerging Leaders (05/10)
- Certificate of Honor for Excellence in Computer Aided Drafting (05/10)
- National Grid Scholarship Award
- PACE Cash Grant Award
- Dean's Achievement Award (5 semesters)

ACTIVITIES

- Phi Theta Kappa (PTK) Honor Society, *Vice President* (01/09–05/09)
- Student Leadership Program, *Student Participant* (01/09–05/09)

RELATED COURSES

- Computer Science I & II
- Digital Logic
- Calculus I, II, & III
- AutoCad & SolidWorks I & II

RESEARCH EXPERIENCE

SMILE Lab, *Research Assistant*, Northeastern University, 01/14–Now.

Lab focuses on the frontier research of applied machine learning, social media analysis, human-computer interaction, and high-level image & video understanding. Our research is driven by the abundance of multimedia online organized as structured datasets built by others and in-house. Having joined SMILE the last semester as an undergrad, a deep passion for the work and team was quickly realized. Thus, motivating me to continue onward as graduate student. Research projects and lab involvement listed as follows.

–Families In the Wild (FIW) Database and Evaluations

FIW is the 1st large-scale image database for kinship recognition (*i.e.*, largest and most comprehensive available in the vision and multimedia communities to date). Some highlights and specifications of FIW are FIW was built entirely in-house: collected, organized, and annotated over 13,000 family photos of 1,000 families *in the wild*, and with text caption describing each photo.

- Contains 650,000+ face pairs, including 11 different relationship types (1st to introduce *grandparent-grandchild* pair-types), from 1,000 families. In line with our intent, family trees span with depth (*i.e.*, spans as far back as 5 generations), breath (*i.e.*, across single generation (e.g. siblings get married, have children, expand family with in laws), and are diverse (*i.e.*, located world-wide).
- Expanded using a semi-supervised labeling scheme (*i.e.*, text metadata and labeled facial images). Using multiple modalities as evidence, FIW was greatly improved.
- Built project page, <http://smile-fiw.weebly.com/>.
- Published several works using DB (see PUBLICATIONS below).
- Hosting data challenge in conjunction with FG 2018, <https://web.northeastern.edu/smilelab/RFIW2018/>.
- Hosted data challenge workshop in conjunction with ACM MM 2017, <https://web.northeastern.edu/smilelab/RFIW2017/>.
- Hosted evaluation as a Data Challenge Workshop held in conjunction with ACM MM 2017. Visit <http://rfiw2017.weebly.com/> for more details.

–Multimedia Event Detection (MED) and Information Retrieval

- Built system to detect complex events in videos by use of various visual features and models. Features included were hand-crafted static-image local (e.g. SIFT sampled at points of interest) and global (i.e., SIFT, Opp-SIFT, and C-SIFT densely sampled across spatial pyramids, and also GIST) features, low-level motion features (e.g. Improved Dense Trajectories), and mid-level static-image features (e.g. deep features extracted from different CNN models). Descriptors were then encoded using either a *bag-of-visual-words* or GMMs under Fisher Criteria (i.e. Fisher Vectors). Modeling was done using off-the-shelf SVMs upon projecting to non-linear space via χ^2 kernel.
- Participated in the Multimedia Event Detection (MED) task of TRECVID 2015, where we achieved 3rd best performance of all MED 2015 submission.
- obtained our best performance by treating deep features extracted from pretrained CNN models as *bag-of-objects* (i.e., Alex-Net pretrained on ImageNet) and *bags-of-scenes* (i.e., Alex-Net pretrained on Places205), then applying early-fusion to train SVMs on top of.

Image Labelling Tool and Large Scale Image Database

- Led effort to collect data, label, and prepare for various types of evaluations. Ultimately, creating 2 image datasets that are supported by multiple benchmarks.
- Developed image labeling (JAVA) tools to build database in an optimal manner.
- Recruited, hired, & managed 25+ undergrads to build 2 image databases: (1) Occupation-based, contains 2,000+ images and 14 class types and (2) Kinship-based, contains 10,000+ images of 1,001 different classes, each class being made-up of sub-classes (i.e., fine-grain) with relationships between resulting in a complex, hierarchical structure (i.e., captured rich label information in annotations).

SMILE Lab, *UGrad Research Assistant*, Northeastern University, 07/10–12/13.

Lab focuses on the frontier research of applied machine learning, social media analysis, human-computer interaction, and high-level image and video understanding. Our research is driven by the explosion of diverse multimedia from the Internet, personal or publicly available photos and videos.

Feature Extracting Tools

- Developed a MATLAB tool to extract various visual features that represent different human actions.
- Determined tracklets for a given image-stack (video) using the KLT algorithm. The resulting tracks are patches of focus during the low-level feature extraction stage (e.g. HOG and HOF descriptors, along with time-series data).
- Compiled MEX-files to utilize C code for optimal performance at run-time.
- Created GUI with various controls, settings, and displays.

OSL, *Undergraduate Research Assistant*, Northeastern University, 07/10–12/13.

As a contributing member of the Optical Science Lab (OSL) I had a great deal of influence, both technical and personal. This experience was one of the main drivers perusing me to continue onward to grad school, as I was exposed to the workings of an academic research lab, saw "behind of the scenes" of a graduate student first hand, while enduring many opportunities to advance the credentials needed to acquire the next step up in the world of academia.

My initial introduction to the OSL back in 2010 was in the form of a Research Experience for Undergraduate (REU), a NSF supported summer internship. Upon that summer, I transferred to

the university and kept my lab space through the duration of semesters, along with another REU the following year (summer 2011). Provided here are descriptions of the two main projects I was responsible for. Although I worked to various degrees on other projects, short-term or small tasks were omitted from the following list.

–Project 2, Three-Photon Fluorescence On Dual

- Implemented an additional imaging modality (3-Photon Fluorescence) on an existing dual-wedge confocal microscope used for preliminary clinical field detection of skin cancer *in-vivo*.
- Selected, characterized and aligned optical components (laser, lenses, filters, etc.) accounting for the laser path; built and characterized electronics (amplifiers and voltage controls) used to on the source and detectors
- Calibrated the system to capture hair images using Melanin specimen.
- Post-processed images using MATLAB.

–FDTD Simulation of Light in Lung Tissue

- Optimized a FDTD algorithm used to investigate the effects of light propagation through lung tissue, simulated using MATLAB.
- Utilized MATLAB Parallel Toolbox for multicore processing.
- Accessed NU Opportunity Linux cluster for distributed computing, over several nodes: automated processes with shell scripting.
- Implemented parallel computing capabilities for enhancing performance and inquiring feasibility analysis for transition towards GPU.
- Developed GPU implementation using Jacket, a third party GPU toolbox.
- Worked with groups from other departments to take definite images of actual lung to more accurately design the model.

Work Experience

05/16–09/17 **Systems & Technology Research (STR)**, *Intern*, Video & Image Understanding.
Interned at STR Summer 2016 and 2017, and part-time in between.

Work involved IARPA's Odin Program (Phase I) during Summer of 2017.

Detailed achievements

- Helped lead the design and implementation API for Odin Project.
- Built system to do black-box adversarial attacks on deep neural nets.
- Organized code from various aspects of project as python package.
- Presented to company as part of the Summer of 2017 intern program.

Worked on IARPA's JANUS Program (Phase II) during Summer of 2016.

Detailed achievements

- Implemented Product Quantization and Nearest Neighbor search via Inverted File Structure to gain 200x speedup with minimal loss in accuracy.
- Developed and Benchmark clustering toolbox in C^{++} (i.e., K-Means, GMM, Spectral, Rank-Order).
- Generated results using Rank-Order tools for NIST data call on face detection and clustering using millions of images and videos.
- Presented to company as part of the Summer of 2016 intern program.

05/14–08/14 **MIT Lincoln Labs (MIT-LL)**, *Intern*, Human Language Technology Group.

Joined Human Language Technology Group as added focus was given to vision technologies. Emphasis was given to realistic data and experimental evaluation. My summer task was to build a Multimedia Event Detection (MED) system.

Detailed achievements

- Built end-to-end image retrieval system using different feature types (e.g., HOG, GIST, PHOW) encoded as visual vocabularies & histograms (i.e., K-means & KD-Trees) and modeled using kernel-based SVMs.
- Characterized models using conventional metrics (e.g. ROC & DET curves) and delivered performance rankings as report summaries.
- Led team and the building of our system for our *début* in NIST's TRECVID workshop series. Ultimately, we ranked 3rd in terms of top accuracies in 2015 MED task.
- Presented to group at the end of the Summer internship.

01/13–10/13 **BBN Technologies**, *DSP Co-op*, Emerging Opportunities (Delta Division).

Worked on Helicopter Alert and Threat Termination-Acoustic System– a small arms detection system installed on helicopters.

Detailed achievements

- Worked on team to improve system performance from 80% to +92%.
- Built JAVA tools to simulate the detection of gun shots from different types of copters in various states as part of User Tools for customer.
- Developed MATLAB GUI and tools to extract features, classify, manipulate, and visualize gun shot data, and also analyze various algorithms using both simulated and field results.
- Collected data at flight tests and performed analysis thereafter

01/12–09/12 **Analogic Corporation**, *Image Reconstruction Co-op*, Security Systems Engineering.

Team focus was on SW components (i.e., critical image processing and the detection algorithms used in CT airport bag-scanners), as the system was transitioning from single to dual-energy CT scanner.

Detailed achievements

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6/11

- Optimized image correction & reconstruction algorithms with GPGPU & Intel Vector library to reduce HW requirements (3-to-2 computers).
- Generated performance analysis reports for different GPU architectures, which supported initiative to upgrade product.
- Implemented interface for other groups to use GPU driven functions using build and parsing tools on company's Linux network.
- Developed ImageJ plugin to analyze CT data. File and data structures were organized to provide easy-to-use GUI used across the team.
- Designed JAVA tool to train and test new employees with modules of increasing difficulty to certify to work on critical data.

01/09–12/10 **Northern Essex Community College**, *Tutor*, Academic Resource & Tutor Center.

Held numerous Teaching Assistant (TA) and Supplemental Instructor (SI) positions for various math courses. Worked as a peer tutor in mathematics, chemistry, and US History II. The Math Center was still in its infancy upon my start. Between the 25 hours of tutoring per week, TA preparations and grading duties, and my own personal work I could be found there almost all hours. After exhaustively promoting the center (tutoring and events), and obtaining trust through patience and considered to unique needs, the following of students I had acquired resulted the need to upgrade the center to a more spacious room, which I helped partition for (indirectly and directly).

Detailed achievements

- Certified as a Level 1 tutor through the College Reading and Learning Association.
- Voted as "Best Tutor of the Month" many, many times.
- Won best pie on Pi Day (3/14) 2 consecutive years.

08/05–12/08 **Joe Robinson Construction**, *Business Proprietor*.

Started and ran company, which included but was not limited to working with customers to design and plan projects, hiring and managing employees, weekly payroll, maintaining tools and advertising.

Detailed achievements

- Obtained Massachusetts Construction Supervisor License and Home Improvement Contractor License.
- Specialized in residential projects: new construction, roofs, siding, and decks.

Professional Development

PUBLICATIONS

- Yue Wu, Zhengming Ding, Hongfu Liu, Joseph P Robinson, Yun Fu. "Kinship Classification through Latent Adaptive Subspace." *In IEEE Automatic Face and Gesture Recognition* (2018)
- Joseph P Robinson, Ming Shao, Handong Zhao, Yue Wu, Timothy Gillis, and Yun Fu. "Recognizing Families In the Wild (RFIW): Data Challenge Workshop" in conjunction with ACM MM 2017" *In Proceedings of the 2017 ACM on Multimedia Conference. RFIW'17*. Mountain View, CA (2017).

- Joseph P Robinson, Ming Shao, Hongfu Liu, Yue Wu, Timothy Gillis, and Yun Fu. "Visual Kinship Recognition of Families In the Wild (FIW)" *Under Review in TPAMI Special Edition: Computational Face* (2017). (Major Revision)
- Joseph P Robinson, Ming Shao, Handong Zhao, Yue Wu, Timothy Gillis, and Yun Fu. "Recognizing Families In the Wild (RFIW): Data Challenge Workshop in conjunction with ACM MM 2017" *In Proceedings of the 2017 ACM on Multimedia Conference* (2017).
- Shuyang Wang, Joseph P Robinson, and Yun Fu. "Kinship Verification on Families in the Wild with Marginalized Denoising Metric Learning." *In IEEE Automatic Face and Gesture Recognition* (2017).
- Joseph P Robinson, Ming Shao, Yue Wu, and Yun Fu. "Families In the Wild (FIW): large-scale kinship image database and benchmarks." *In Proceedings of the 2016 ACM on Multimedia Conference* (2016).
- Joseph P Robinson and Yun Fu. "Pre-trained D-CNN models for detecting complex events in unconstrained videos." *SPIE Commercial + Scientific Sensing & Imaging* (2016).
- Joseph P. Robinson, Edward Scott, Kevin Brady, Charlie K Dagli, and Yun Fu. "NEU- MITLL @ TRECVID 2015: Multimedia Event Detection by Deep Feature Learning." *In Proceedings of TRECVID 2015, NIST, USA* (2015).
- Yair Mega, Josef Kerimo, Joseph P Robinson, Ali Vakili, Nicolette Johnson, and Charles A DiMarzio. "Three-photon fluorescence imaging of melanin with a dual-wedge confocal scanning system." *SPIE BiOS. International Society for Optics and Photonics* (2012).
- Tristan Swedish, Joseph P Robinson, Maricris Silva, Andrew Gouldstone, David Kaeli, Charles DiMarzio, "Computational model of optical scattering by elastin in lung." *Three- Dimensional & Multidimensional Microscopy: Image Acquisition & Processing XVIII* (2011).

COMMITTEES / E-BOARDS

- Chair of Workshop on Faces in Multimedia held in conjunction with 2018 ICME
- PC for the 2018 IEEE Conference on Automatic Face and Gesture Recognition (FG 2018)
- Chair for Recognizing Families In the Wild (RFIW) Data Challenge held in conjunction with FG 2018
- Organizing and Co-Chair for 2017 New England Computer Vision workshop at NEU (NECV 2017)
- Program Committee (PC) for 2nd Big Data Transfer Learning workshop in conjunction with 2017 IEEE Big Data Conference (BDTL 2017)
- PC for International Conference on Advances in Multimedia (MMEDIA 2018)
- TPC Member for the (1st) IEEE International Conference on Multimedia Information Retrieval and Processing (MIRP 2018)
- Workshop Chair for RFIW Data Challenge Workshop held in conjunction with ACM MM 2017
- PC for the IEEE's FG 2017

- Relations Officer, IEEE R1 Student Activities Committee Region, 2-4 North American (01/14–Present)
- Lead Research Ambassador, Student Research Engagement Committee, NU (12/12–Present)
- President, IEEE, Northeastern University (12/13–05/14)
- SGA/SAC Representative, Northeastern University (09/12–12/13)
- Student Representative, Student Activities Committee, College of Engineering (10/12–12/13)
- Student Senator, Student Government Association, Northeastern University (10/12–12/13)
- Committee Member, Academic Affairs, Northeastern University (10/12–12/13)
- Vice President, Phi Theta Kappa Honor Society, Northern Essex Community College (09/10–12/10)

POSTERS

- "Kinship Verification on Families in the Wild with Marginalized Denoising Metric Learning" at FG 2017.
- "The 1st Large-Scale Kinship Recognition Database: To visually recognize and understand families in the wild" during ASL4GUP Workshop at FG 2017.
- Joseph P Robinson, Ming Shao, Yue Wu, Yun Fu. "Families in the Wild (FIW): Large-Scale Kinship Image Database and Benchmarks," at ACM Multimedia, Amsterdam Netherlands, 2016.
- Joseph P Robinson, Ming Shao, Yue Wu, Yun Fu. "Families in the Wild (FIW): Large-Scale Kinship Image Database and Benchmarks," at RISE, Northeastern University, 2016.
- Joseph Robinson, Robert Watson, Sam Coe, Matt van Berlo, Josh Johnson, Bahram Shafai. "i90 Tunnel Inspection Robot," at RICC and CDSF, Northeastern University, 2014.
- Yair J. Mega, Joseph Robinson, Ali Vakili, Charles A. DiMarzio. "3-Photon Fluorescence on a Confocal Microscope using a Dual-Wedge Scanner," at RICC, Northeastern University, 2011.
- Joseph P. Robinson, Tristan B. Swedish, David Kaeli, Charles A. DiMarzio. "Computational Model of Optical Coherence Tomography in Lung Tissue: A Need for Speed," at Advances for GPU Computing, RISE, and RICC at Northeastern University, also at NSF Awardees Conference, Raymond City, West Virginia, 2011.

CONFERENCES

- IEEE Automatic Face and Gesture Recognition, Washington DC (04/17)
- ACM Multimedia, Amsterdam, Netherlands (10/16)
- Research, Innovation & Scholarship Expo (RISE), Northeastern University (04/14)
- IEEE Region 1 Student Conference, New Jersey Institute of Technology (03/14)
- Research, Innovation & Scholarship Expo (RISE), Northeastern University (03/12)
- Advances for GPU Computing, Northeastern University (10/11)

- Research and Industrial Collaboration Conference, CENSISS (11/11)
- NSF Awardees Conference, Virginia, National Science Foundation (03/11)

PRESENTATIONS

- STR Final Intern Presentations (08/17)
- "Families In the Wild (FIW): Large-Scale Kinship Image Database and Benchmarks." Presented at 2016 New England Computer Vision Workshop at BU.
- STR Final Intern Presentations (08/16)
- MIT-LL Final Intern Presentations (08/15)
- ECE Senior Capstone Presentation and Demo, Northeastern University (04/14)
- IDEA - Husky Startup Challenge, Northeastern University (02/14)
- EECE 5698 Final Project, Northeastern University (12/13)
- SREC Undergraduate Research Freshman Seminar, Northeastern University (11/13)
- SREC Undergraduate Research Freshman Seminar, Northeastern University (09/13)
- EECE 4790 Final Project, Northeastern University (08/13)
- EECE 3302 Final Project, Northeastern University (12/12)
- EECE 3000 Final Project, Northeastern University (11/12)
- COE Undergraduate Research Freshman Seminar, Northeastern University (11/12)
- COE Undergraduate Research Freshman Seminar, Northeastern University (10/12)
- REU Final Presentation, Northeastern University (08/11)
- Research & Industrial Collaboration Conference, Northeastern University (10/11)
- REU Final Presentation, Northeastern University (08/10)

LICENSES / CERTIFICATIONS

- Certificate of Completion: Gordon Engineering Leadership Program, CENSISS (02/12)
- Computer Aided Drafting Certificate, Northern Essex Community College (05/10)
- Home Improvement Contractor License (HIC), The Commonwealth of Massachusetts (05/07)
- Massachusetts Construction Supervisor's License (CSL), Merrimac College (05/06)

Technical Skills

DEVELOPMENT TOOLS AND LANGUAGES

Basic Shell Scripting, Docker

Intermediate Apache Spark, C, CUDA, Keras, Tensorflow

Advanced Python, MATLAB, JAVA, C++, Caffe, Git, Latex

Summary Experienced in parallel computing: general-purpose computing on graphics processing units (GPGPU), distributed computing, cluster computing, Intel's Vector Libraries. Worked with Apache Spark fundamentals, multi-threaded/ cluster execution. Experience building and configuring PCs, controller mapping, along with writing low-level Assembly and Verilog code. Familiar with document processes, such as LATEX. Capable of creating detailed presentation figures and various process flow-charts, along with conceptual-based data visualization.

OPERATING SYSTEMS

- Linux, Ubuntu & Fedora
- Unix
- Windows (2000-Cur.)

COMPUTER SW & ARCHITECTURE

- MATLAB
- SolidWorks
- PyCharm
- ImageJ
- AutoCAD
- Slack
- NetBeans
- PSpice
- Trello
- Processing
- Multisim
- SourceTree
- Xcode
- Excel, PP, Word
- EverNote
- Latexian
- Visual Studio
- Emacs

HW COMPONENTS & TOOLS

- Spectrum Analyzers
- Optical Power Meters
- Circuit Characterization
- Oscilloscopes
- Photodetectors
- Servo Controls
- Function Generators
- CCDs
- Board Level Design
- Multimeters
- Raspberry Pi
- GPUs
- Soldering Irons
- Optics Alignment
- Optics Characterization

Personal

SKILLS

- Demonstrated ability with working on research-based projects and tasks.
- Excellent interpersonal, problem-solving and analytic skills.
- Confident public speaker, regardless of the audience.
- Exceptional with hands-on: wired electronics, woodworking, part assembling, etc.
- Proved capable to act as a contributing team member, as well as a team leader.


INTERESTS


- Traveling
- Boating/ Fishing
- Skiing
- Ice hockey
- Cooking
- Reading/ Learning


DETAILS

DOB 18th of May, 1987

Website <http://www.jrobsvision.com/>

 <http://www.facebook.com/joe.robinson.39750>

 <https://www.linkedin.com/in/jrobby>

 <https://twitter.com/huskyjo>

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11/11