Krit Goyal
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EDUCATION

Northeastern University, Boston, MA   Sept. 2018 - Present
Khoury College of Computer and Information Sciences   Expected graduation: April 2020
Candidate for Master of Science in Computer Science, **GPA: 4.0./4.0**
Related courses: Large-Scale Parallel Data Processing(ongoing), Information Retrieval(ongoing), Data Mining Techniques, Programming Design Paradigm, Algorithms, Foundations of AI, Game AI

Birla Institute of Technology and Science(BITS) Pilani, Rajasthan, India   May 2017
Bachelor of Engineering in Electrical and Electronics Engineering, **GPA: 7.78/10**
Related courses: Machine Learning, Object Oriented Programming, Data Structures and Algorithms, Discrete Mathematics, Operating Systems

TECHNICAL KNOWLEDGE

Scripting:	Java, Python, C#, Scala
Web technologies:	React.js, node.js, express.js, HTML5, CSS3, PHP, Oracle JET
OS:	Android, Ubuntu, MacOS, Windows
Distributed Systems:	AWS, Hadoop Map-Reduce, Spark
Databases and others:	git, MySQL, Firebase, MongoDB, Unity

WORK EXPERIENCE

mHealth Research Group, Boston, MA
Graduate Research Assistant, Android and Machine Learning Engineer   Oct 2018 - Present
- In a team of 5, developed intelligent Android apps for phone and smartwatch to collect info, study and constructively affect user behavior of over 200 participants
- Used self-report methods, and device sensors like accelerometer and heart rate monitor for 24x7 data collection
- Made extensive use of Firebase for database, storage, authentication and crash analysis of TBs of data
- Leveraged machine learning for user data analysis and build context-sensitivity, DBSCAN for location clustering
- Reduced data storage and transfer over network by 65% using differential encoding

Samsung Research Institute, Noida, UP, India
Engineer I, Codec Team, Media Services   June 2017 - July 2018
- Supervised intern on design and development of Android app for auto camera mode selection with Google ML kit
- Developed gesture driven android app for ad-hoc video editing using FFMPEG
- Improved image storage efficiency by 50% with better encoding using CMake and Nokia HEVC library

Oracle, Bangalore, India
Software Development Intern   June 2016 - Dec 2016
- Developed faster, lighter and more responsive app UI solution for Oracle Hyperion Planning
- Used OracleJET, a Javascript library bundle, to implement ad-hoc web pages and visualization generation
- Built and deployed secure Java REST APIs

PROJECTS AND ACTIVITIES

Optimizing compiler inlining with Machine Learning (with Simon Peyton Jones), DMT, NEU   June - Aug 2019
- Achieved 18.8% speedup by modifying NEAT-python to model and explore topologies for deep Neural Networks, execute our modified Glasgow Haskell Compiler(GHC), and benchmark using NoFib

Resource and Colony Management AI, Game AI, NEU   Mar - Apr 2019
- Developed an AI that can build a plan to get to a target resources stockpile and income. Also built a small resource management game for the AI to play. UI built using Unity, scripting with C#

Emergency caller android app, MLH Hackathon, RIT, NY   Feb 2019
- Built Emergency Calling android based solution which rings callee phone even if on silent/vibrate using Firebase Cloud Messaging

Neural Style Transfer: Analysis and Improvement, Foundations of AI, NEU   Nov - Dec 2018
- Studied, analyzed and reduced loss of neural style transfer by 18% using VGG network introduced by Gatys et. al.

Inventory management Android app for SMEs   April - Aug 2018
- Used Firebase for sign in and authentication, MongoDB for storage, node.js and express.js for REST APIs