

Krit Goyal

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Available: Jan - Aug 2020

EDUCATION

Northeastern University, Boston, MA

Sept. 2018 - Present

Khoury College of Computer and Information Sciences

Expected graduation: Dec. 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, PHP

Front-end technologies:

React.js, HTML5, CSS3, Oracle JET

Platforms / OS:

Android, Linux(Ubuntu, MacOS), Windows

Others:

AWS, Hadoop Map-Reduce, Spark, git, MySQL, NoSQL, Firebase

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
- Used self-report methods, and device sensors like accelerometer and heart rate monitor for data collection
- Made extensive use of Firebase for database, storage, authentication and crash analysis
- 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

- Developed android app for automatic camera mode selection in phone with Google's ML kit
- Created POC android app for in-place video editing using FFMPEG
- Built POC for storage efficient image file format for Android with help of CMake and Nokia's open source library

Oracle, Bangalore, India

Software Development Intern

June 2016 - Dec 2016

- Developed POC for Oracle JET integration with ADF for a faster, lighter and more responsive app UI
- Harnessed the power of OracleJET, a Javascript library bundle, to implement ad-hoc web page generation
- Deployed REST APIs using Java

PROJECTS AND ACTIVITIES

Optimizing compiler inlining with Machine Learning (with Simon Peyton Jones), DMT, NEU June - Aug 2019

- Modified NEAT-python to model and explore topologies for deep Neural Networks, execute our modified Glasgow Haskell Compiler(GHC), and benchmark using NoFib
- Achieved 18.8% speedup over default

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

- Emergency calling android app 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 using VGG network introduced by Gatys et. al.

Android App Development

April - Aug 2018

- Created android apps for SMEs to showcase and manage inventory. Used Firebase for user sign in and authentication, stored data in MongoDB Atlas with the REST APIs being served by a node JS server