

Kavin Chandrasekaran

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EDUCATION

- **Worcester Polytechnic Institute** Worcester, MA
PhD in Data Science May 2023(Expected)
- **Indiana University** Bloomington, IN
Masters in Security Informatics May 2013

SKILLS SUMMARY

- **Languages:** Python, Java, SQL, R
- **Data Visualization Tools:** Tableau
- **Frameworks:** Hadoop, Spark, MongoDB, PyTorch, Scikit-learn

EXPERIENCE

- **Research Assistant - Prof. Emmanuel Agu** May 2018 - Current
Worcester Polytechnic Institute Worcester, MA
 - Developing machine learning and deep learning architectures for sensor driven complex human activity recognition and generative models to be used in patient monitoring, ailment predictions and overall healthcare improvement
- **Sr. Infrastructure Services Engineer** July 2013 - December 2015
National Government Services Indianapolis, IN
 - Pioneered an effort to integrate OEM into daily monitoring workflow and created a centralized dashboard for monitoring and troubleshooting the application using the product iDashboards
 - Created and maintained scripts to monitor the performance and availability of the application and create automated reports using data from Patrol, OEM and BAC (Business Availability Center)
- **IT Intern** January 2013 - April 2013
National Government Services Indianapolis, IN
 - Worked on a CSR Staffing analysis to predict the CSR staffing requirements, based on previously known staff availability, requirement and their efficiency
- **Junior Support Engineer Intern** May 2012 - August 2012
Likeminds Consulting Inc. Piscataway, NJ
 - Provided support for AARP's identity management system and security infrastructure with responsibilities including ensuring application availability, handling network failures, disk space issues and replication issues

SELECTED PUBLICATIONS

Peer-reviewed Publications

1. *Get Up! Assessing Postural Activity & Transitions Using Bi-Directional Gated Recurrent Units On Smartphone Motion Data* **K. Chandrasekaran**, W. Gerych, L. Buquicchio, E. Agu, & E. Rundensteiner. IEEE Healthcare Innovations and Point-Of-Care Technologies, 2019.
2. *CARTMAN: Complex Activity Recognition Using Topic Models for Feature Generation from Wearable Sensor Data* **K. Chandrasekaran**, L. Buquicchio, W. Gerych, A. Alajaji, E. Agu, & E. Rundensteiner. IEEE International Conference on Smart Computing (SMARTCOMP), 2021.

SELECTED ACADEMIC PROJECTS

- **PlentyOfReviews (Spring 2018):** Developed a website which provides users the most diverse reviews for a given airbnb listing. Built using machine learning techniques like topic modeling
- **Country classification based on accent (Spring 2018):** Designed a multi-task learning approach using neural networks to determine the country of origin of a person based on their accent
- **Big Friends - Trust friends with Facebook Posts (Spring 2013):** Designed and developed a mechanism for screening impetuous Facebook posts made during intoxication. Developed a Windows Phone application, which implemented the screening mechanism by posting to Facebook, only after ensuring the deliberateness or getting feedback from a set of trusted friends
- **Health Monitor Using Kinect (Spring 2012):** Developed a health monitor application using the Kinect sensor, which monitored the food habits and analyze the amount of junk food consumed by the user (Oral Presentation at: Evaluation of Off-the-Shelf Technologies for Health Applications, UbiComp 2012)