

# Bharat Prakash

911 S Charles St  
Baltimore, MD, USA  
☎ (+1) 970 368 0788  
✉ bhp1@umbc.edu

## Education

- 2017–present **PhD, Computer Science**, *University of Maryland, Baltimore County, Baltimore, MD.*
- 2012–2014 **MS, Computer Science**, *University of Maryland, Baltimore County, Baltimore, MD.*
- 2006–2010 **BE, Information Technology**, *University of Pune, India.*

## Experience

- 2017–present **Graduate Research Assistant, UMBC.**  
Artificial Intelligence, Machine Learning, Deep Reinforcement Learning.
- 2014–2017 **Software Engineer, eBay/PayPal Inc.,** Baltimore, MD.  
Worked with PayPal Credit and PayPal Working Capital Team. Back-end web services and API infrastructure.
- Summer 2013 **Software Developer Intern, Comcast Labs,** Washington DC.  
Xfinity Search Infrastructure Team
- Spring 2013 **Graduate Assistant, UMBC.**  
Course: Discrete Structures. Grading and assisting the professor.
- 2010–2012 **Software Engineer, Persistent Systems,** Pune, India.

## Academic Projects

- 2018 **Improving Safety in Reinforcement Learning using Model-Based Architectures and Human Intervention.**  
A hybrid architecture for reducing the human intervention time by combining model-based and model free methods and improve sample efficiency. (Paper Under Review at FLAIRS 2019)
- 2018 **Representation learning by solving auxiliary tasks on Xray images.**  
Learning image representations on unannotated Chest Xray images using the method described in Noroozi and Favaro. Achieved improvements in classification tasks compared to the baseline.
- 2017 **Grammatical Error Correction Using Sequence-to-Sequence models.**  
Treating Grammatical Error Correction as a Machine Translation task using LSTM seq2seq networks. (Poster Presentation at MASC-SLL-2018)
- 2017 **Colorizing monochrome photographs.**  
Using deep neural networks to colorize monochrome photos. Course project, Data Science.
- 2016 **University FAQ ChatBot.**  
Facebook chatbot to answer basic questions about the university. Natural language understanding, NER, information retrieval.
- 2015 **IVR Payment.**  
Developed an IVR system to process payments using PayPal APIs, Asterisk on Raspberry Pi. Internal hackathon at PayPal.
- 2013 **Opinion Miner - Sentiment Analysis of Product Reviews.**  
Sentiment analysis on product reviews from multiple sources like Twitter, Amazon, YouTube consolidated to provide a sentiment score.

## 2012 **Visualizing US Census/Crime Data.**

Used census data related to crime, housing and wages to show trends of various regions in the US. Used maps and charts to show the data for each state in an interactively. Course project, Service oriented architecture.

---

### Relevant Coursework

#### Undergraduate

Operating Systems, Databases, Data Structures, Programming Languages, Computer Networks, Distributed Systems, Theory of Computation, Calculus

#### Graduate

Advanced Operating Systems, Design and Analysis of Algorithms, Advanced Computer Architecture, Artificial Intelligence, Machine Learning, Introduction to Computer Vision, Introduction to Natural Language Processing, Data Science

---

### Leadership Experience and Technical Awards

- 2009 Event coordinator, University Level Programming Contest
- 2009 Team member, Robocon, Asia-Pacific robotics competition
- 2010 Event Head, Undergraduate Robotics Competition
- 2011 1st prize in 36 hour hackathon

---

### Extra Curricular

Soccer (Football), Photography, Video Editing and Basic Animation