101 Chestnut St CPO 16 Berea, KY 40404 (859) 248 4851

# ISHWAR AGARWAL

E: a.isshwar@gmail.com W: IshwarAgarwal.com Linkedin.com/in/agarwali Github.com/agarwali

Expected Graduation: May 2018

### **EDUCATION**

### B.A. in Computer and Information Science; B.A in Mathematics

Berea College, Berea, KY

- GPA 3.85, Computer Science Major GPA: 3.92, Mathematics Major GPA: 4.00
- Course Highlights: Software Design & Implementation, Data Structures, Computational Complexity, Linear Algebra,
  Software Engineering, Computational Intelligence, Numerical Analysis, Embedded Systems, Computer Security

### **SKILLS AND ABILITIES**

• Programming Languages: Python, C/C++, Ruby, JavaScript

• Others: SQL, Linux, Git, MATLAB, RESTful API

• Web Skills: HTML, CSS, Flask, Angular 2, PHP, jQuery

• Languages: English, Bengali, Hindi

## **WORK EXPERIENCE**

### Co-Lead Teaching Assistant - Data Structures

Berea College Computer Science, Instructor: Dr. Jan Pearce

- Manage a team of 18 Teaching Assistants and organize weekly departmental meetings
- Assist faculty in managing data structures course and tutor students in the weekly lab for a class of 53 students

Student Programmer August 2015 – Present

Berea College Computer Science | Berea College, Berea, KY

- Design and develop 3 web applications used by 1600+ students and 300+ faculty and staff within a team of 8
- Make administrative workflow more efficient by saving administrator, faculty and staff 200 hours per term
- Maintain systems and resolved 3+ issues per week on 3 live web applications

### **Software Developer Intern**

May 2016 - July 2016

May 2016 - Present

Interapt | Louisville, KY

- Built the client-side of a single-page web application to handle employee information more securely using Angular 2 framework by creating user access control, and reducing human errors.
- Facilitated a team of 5 designers and developers for making software design decisions using agile methodology

### **Co-founder and Chief Executive Officer**

February 2013 - May 2015

Bookshopbd.com | Dhaka, Bangladesh

- Co-founded and developed an online bookstore startup using OpenCart CMS platform
- Remotely managed website and business operations of the store to increase sales by 30%

### **TECHNICAL EXPERIENCE**

### **Projects**

- Elementary (2016). An IBM Watson powered teaching assistant that answers students' questions related to programming. Won IBM award at HackNC among 650+ students. [IBM-Watson API, Python(Flask), Jinja]
- My Health Matters (2016). An Android Pay-esque app for health insurance that notifies users to get HbA1C screening, flu-shots etc. Won \$1000 at MIT Health Hackathon among 100+ participants. [Python(Flask), Jinja]
- Universify (2016). A StackOverflow-esque Q&A forum for university students to get help in their coursework. Won 2<sup>nd</sup> place at Derbyhacks Hackathon with a team of 4. [REST API in Python(Flask), Client-side in Angular 2]
- Campus Tour Guide (2015). A campus tour generator application that generates the shortest Hamiltonian path given a set of buildings users want to visit using Branch and Bound Algorithm. [Python, Graph Theory]
- Al Tic-Tac-Toe (2015). A Tic Tac Toe game where an artificially intelligent computer player is unbeatable against human player. The Al is implemented using Min-Max algorithm. [Python, Numpy, Decision Tree]

# ISHWAR AGARWAL

E: a.isshwar@gmail.com W: IshwarAgarwal.com Linkedin.com/in/agarwali Github.com/agarwali

# **TECHNICAL EXPERIENCE (cont'd)**

- Al Flappy Bird (2016). Trained a system to play flappy bird game using reinforcement learning (machine learning) algorithm. [C++, Python, Neural Network]
- **Genetic Algorithm Project (2016).** Implemented a fully working genetic algorithm and designed a healthy meal generator application using the Genetic Algorithm. [C++]

### **Open Source Contributions**

• OctoPrint(2015). Resolved two issues for OctoPrint, an open source web-based host for 3D RepRap printers [Python]

### COMMUNITY ENGAGEMENT

### Berea Innovation Studio | Studio Manager

August 2016 - Present

 Lead a team of 20 students to work collaboratively to host and facilitate workshops and pop-up classes related to idea generation and design thinking

**University Innovation Fellowship** | Epicenter, NSF, Stanford University and VentureWell

February 2016 - Present

 One of 607 fellows nationwide helping college students develop an entrepreneurial mindset and creative confidence by organizing workshops to teach Design Thinking, Prototyping etc.

### Entrepreneurship for the Public Good | Berea College

May 2015 - June 2015

- Collaborated with local activist, civic leaders and the Tourism Commission to achieve the city of Berea Trail Town Certification by assessing the feasibility of advancing adventure tourism
- Conducted workshop of 20+ students teaching them the Business Model Canvas and the Lean Startup Process

### **AWARDS AND HONORS**

### **Awards**

- Ballard-McConnell-Willis Mathematics Scholarship. Awarded \$10,000 worth scholarship for excellence in Mathematics, out of 300 students in the junior class
- Four year Full Tuition Scholarship. Awarded four year full-tuition scholarship to attend Berea College worth more than \$100,000
- EducationUSA Opportunity Fund. One of the 5 students in Bangladesh awarded \$2,300 scholarship to study in the United States
- Champion at National Physics Olympiad. One of the 8 champions at National Physics Olympiad Bangladesh, 2014 for solving challenging problems in physics

### **Honors**

- Phi Kappa Phi (2016)
- Pi Mu Epsilon (2015)
- Epsilon Pi Tau (2015)
- Dean's List Recipient (Fall 2014 Spring 2016)