

# Kasturi Shirish Vartak

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## EDUCATION

### State University of New York, Binghamton

Master of Science in Computer Science

Expected May 2021

Courses: Algorithms, Software Engineering, Cloud, Web, Data Science, Data Mining, Architecture, OS

### PVG's College of Science, Savitribai Phule Pune University

MSc in Computer Science

May 2017

BSc in Computer Science

May 2015

## TECHNICAL SKILLS

**Languages:** Python, Java

**Web Technologies:** JavaScript, jQuery, NodeJS, React, Express, Flask, HTML5/CSS3, DOM

**Database, OS & Tools:** SQL, MongoDB, JSON, PostgreSQL, Hadoop, HDFS, Spark, Docker, Kubernetes, GCP, Git, Linux

**Applications:** Salesforce.com (Service Cloud), Oracle Service Cloud

**Additional:** Numpy, Pandas, matplotlib, bokeh, folium, Stata

## EXPERIENCE

### Economics Research Lab, Research Assistant | Binghamton University

August 2020 - Present

- Develop an algorithm to map kldb92 to kldb2010 of Socio-Economic Panel (SOEP) data to analyze the labor market effects of Syrian refugees in Germany

### Global Health Impact, Web Developer | Binghamton University

June 2020 - September 2020

- Built a forecasting tool to measure pharmaceutical product's impact to advance access for medicines using Python, Flask, SQLite, React and JavaScript
- Developed scripts to automate data collection/analysis process for Global Health Impact Index

### Veritas Software Technologies, Associate IT Developer | Pune, India

July 2017 - April 2019

- Worked as a cross functional SME (Subject Matter Expert) to resolve and communicate issues with third-party, developed backend APIs and scripts for integration
- Reduced workspace rules from 30 to 12 and case loading time by 30% using query, workspace and workflow optimization
- Provided temporary workaround and permanent code fixes during Hyper-care Post Go-Live
- Received 3 Veritas applause awards for exceptional perseverance

### Veritas Software Technologies, Intern at Masters Level | Pune, India

January 2017 - June 2017

- Designed and Developed Landing page and Case management module using integration with Salesforce API, Enterprise WSDL, Connect Web Services
- Built Historical Case View portal for Veritas agents using integration with Veritas DataHub to get incident information

## PROJECTS, Binghamton University

### Twitter chaos effect on Billboard | Python, PostgreSQL

October 2020 - Present

- Build a web scraper for Billboard's featured charts and tweets using Twitter streaming API
- Perform sentiment analysis and prediction algorithms to analyze how twitter affects popularity on Billboard charts

### Book Shop System | Node.js, JavaScript, Microservices, Express, React, MongoDB, REST

June 2020 - August 2020

- Implemented a full-stack web-based application for maintaining a book cart
- Utilized dynamic pagination to provide book search and list all books

### Philadelphia Crime Data Analysis and Visualization | Python, folium, pandas, Jupyter notebook

June 2020

- Performed data manipulation tasks such as data cleaning with Pandas, Numpy
- Created interactive visualization map of crimes in Philadelphia with crime category, address

### Live Video Streaming and Chat Web Application | Node.js, GCP, Docker, Kubernetes, YAML

February 2020 - April 2020

- Built a containerized web application to engage multiple users at once and to improve audience interaction
- Implemented Horizontal Pod Autoscaler to scale number of replicas based on CPU utilization on GKE

### Microprocessor Pipeline Simulator | C

August 2019 - December 2019

- An Out-of-order APEX pipeline simulator to demonstrate cycle-by-cycle execution of sequence of assembly instructions
- Implemented multiple FUs, ROB to support Load-Store, Branching instructions and data forwarding