# Aviral Srivastava

• Github • LinkedIn • Website
avi.srivastava254084@gmail.com • +91 7007087512

## EDUCATION

**Vellore Institute of Technology**, Chennai, Tamil Nadu, India. Jul 2014 - May 2018

- B.Tech, Computer Science. CGPA : 8.34 / 10.00(relative)

## WORK EXPERIENCE

**SocialCops** Jul 2018 - Present

- Data Engineer
  - Building Data Collaboration platform at SocialCops: serverless data streaming and data processing
  - Built Versionator: version control for tabular data
  - Built Pallet: an abstraction of Airflow to automate the generic ETL Pipelines.
  - Built Data Repository: ”Versionator” to version data files of all formats.

**Bubble** Apr 2017 - Jun 2018

- Co-founder.
  - Built a distributed systems for processing social media content and applying emotional as well as sentimental analysis.
  - Got selected in Y-Combinator startup-school 2019 in mentorship track.
  - Got featured on IBM’s developer blog.
  - Stack: Python, NodeJS

**SocialCops** May 2018 - Jun 2018

- Data Engineer Intern
  - Built Woodward: An automating micro-service for pricing.
  - Introduced Event Sourcing mechanism in Collect app for various business use cases.

**Wingify** Dec 2017 - Mar 2018

- Software Developer Intern.
  - Built Segmenter Services for VWO and PushCrew: Used by 10k+ accounts daily.
  - Stack: PHP

**Commutatus** Jun 2016 - Jul 2016

- Full Stack Developer Intern.
  - Built Customer Relationship Management tools.
  - Stack: Python, PHP

**LeagueSX** Dec 2015 - Feb 2016

- Python/Django Backend Developer Intern.
  - Built a content-management system for daily updates in football leagues.
  - Worked on making a ”private-league” option in the fantasy football game.
  - Stack: Python

## RESEARCH EXPERIENCE

**School of Computing Science**, University of Manchester Aug 2017 - Present

- Data Science Research Intern.
  - Implementing membranous plasticity in the Kinetic LGN Model using Regression Learning.
  - Built a computational neural mass framework to study synaptic mechanisms underlying alpha and theta rhythms using Numerical Analysis.
  - Mentor: Dr Basabdatta Sen Bhattacharya, Researcher, Kirkland Building, University of Manchester, UK.
  - Stack: Python

**School of Computing Science and Engineering**, VIT University Sep 2017 - Nov 2017

- Data Science(Machine Learning) Intern
  - Built a Machine Learning model to predict backlogs of Engineering undergrads.
  - Accuracy of > 95%
  - Mentor: Prof Sakkaravarthi, Former Professor, VIT University, Chennai.
  - Stack: Python

**School of Computing Science and Engineering**, VIT University Jul 2017 - Dec 2017

- Software Engineering Research Associate
  - Proposed a method: a framework of designing Requirements Engineering in IoT based applications.
  - Applied requirement engineering models for Object Oriented Design and Analysis(OODA-RE).
  - Published a research paper in IJSEA 2018 January edition.
  - Mentor: Dr M Sivagami, Professor and Researcher, VIT University, Chennai.
  - Stack: Python, Java

**Data Science Lab, Computer Science**, University of Liverpool Jun 2017 - Nov 2017

- Data Science Research Intern.
  - Worked on Mapper Algorithm, a topological data science research project. Led a team of three interns.
  - Built a Cloud generation platform: Cloud (randoms or algorithmic generated) around a graph (connected, disconnected).
  - Improved the processing chain with (minimally) filter functions in terms of visualization of the results.
  - Mentor: Dr Vitaliy Kurlin, Associate Professor, Computer Science, University of Liverpool, UK.
  - Stack: Python, C++, Boost Graph Library

**PUBLICATIONS**

- A Software R E Technique Using OOADA-RE and CSC for IoT Based Healthcare Applications Jan 2018

**PROJECTS**

- EEG Simulator
  - Free Open Source EEG Simulator for use by Researchers.
  - Applied Regressional Learning algorithms to make it adaptable to different states of mind: resting, gaming, etc.
  - Included pre-processing and cleaning of EEG recordings for their further simulations/
- Self Driving Remote Control Car
  - A remote control car which is to be driven on a path for a few times via keyboard to make it learn the path and then it can drive itself without any human involvement(even remotely).
  - Usage proposed to Integral Coach factory where remote automation is to be replaced by this model.
  - Max testing accuracy achieved: 73 percent, maximum training accuracy achieved: 90
- E-Commerce Framework
  - Created a framework easy to customize(back-end) on MVC ideology
- Vishleshan
  - An MVC framework providing REST API Services for Conversion Optimization Platforms.
- CICD Pipeline de Docker
  - A CICD pipeline for Dockerised Cloud App
- Footfall Tracker
  - To track footfall for everyday inside mess and then based on the data calculated generate statistics.
  - Applied Linear Regression to the Wei-bull distribution and predicted the number of students that would turn up in the canteen on a given Menu.

**SKILLS AND INTERESTS**

- **Development:** AWS Glue, Kubernetes, Airflow, Key-value databases *viz* Cassandra, RocksDB, etc; Celery, Hadoop, Spark, Redis, Memcache, Kafka, Django, OpenCV, Boost-Graph Library, Py-Test, Wordpress, Woo-commerce.
- **DevOps:** Vagrant, Git, Docker (Basic), AWS, Linux.

**VOLUNTEERSHIP**

- **Love Heals Cancer:** Social Media Marketing, On-ground report verification.