Chintan Bimal Maniyar

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My Web Portfolio
My LinkedIn Profile
My GitHub Profile

Career Objective

To develop a research career and excel in Data Science, NLP, Machine Learning and Deep Learning via challenging milieus and ultimately gift something beautiful to the world.

Education

Master of Technology – Remote Sensing & GIS — Graduating June 2021
Specialization: Satellite Image Analysis and Photogrammetry
Indian Institute of Remote Sensing (IIRS),
Indian Space Research Organization (ISRO),
Dehradun, Uttarakhand

Bachelor of Technology – Computer Engineering — Graduated, May 2019
Chandubhai S Patel Institute of Technology,
Charotar University of Science and Technology,
Anand, Gujarat
CGPA: 9.62/10

Skills

- Programming (Python, C, C++, JAVA, R)
- Machine Learning and Data Analysis, Data Preprocessing, NLP, NLTK, Pandas
- Web Development (HTML 5, CSS 3, Bootstrap 3.3.7, Django, Javascript, DB-MySql)
- Satellite Image Processing – ESA SNAP Tool
- Google Earth Engine
- Aquatic Remote Sensing
- OpenCV- Facial Recognition, Image Translation & Modelling
- VCS – GitHub, BitBucket

Work Experience

- **Applied Research Intern (Machine Learning & Natural Language Processing)**
  Dec 2018 – June 2019 (7 mos)
  Centre for Indian Language Technology (CFILT) Lab,
  Indian Institute of Technology, Bombay
  Research intern under Prof. Ganesh Ramakrishnan. Text classification using ML, NLP, NLU and NLI - word embeddings and entity based summarization at sentence level, sampled more than 5 million tuples of textual data, developed algorithm for sentence pair similarity, and supervised web development in Django with technical and managerial panoramas. Lead a team of 4 and oversaw the client interaction and recruitment process. Student mentor to incoming interns at IITB (Probability Theory and Statistical Modelling)
  Current Research: *Weakly Supervised Text Alignment, Sentence Endorsement, BERT, Sentiment Degree Prediction*

- **Research Intern (Remote Sensing Data Science)**
  Jul 2018 – Aug 2018 onsite, now remotely
  Remote Sensing and Spectroscopy Lab,
  University of Georgia, GA, USA
  Research intern under Dr. Deepak Mishra for satellite image analysis and photogrammetry, and as a remote sensing data analyst – processing satellite images from the Sentinel 2, Sentinel 3 and LandSat series (NASA and European Space Agency satellites), on SNAP and Google Earth Engine, for the CyanoTRACKER project. (cyanotracker.uga.edu)
  Current research: *Rayleigh Correction for Sentinel 3 Satellite Imagery, State Change via VI using Sentinel 2 data*

- **Full Stack Web developer, SEO Specialist and Creative Content Writer**
  Aug 2017 – Jan 2018 (5 mos)
  KickStart Solutions LLP, Vadodara
  Full Stack Web Development on SEO (AdWords) and SPAs in Django and HTML + CSS stack, and RPA. Proofreading, technical reviewing, content writing

Trainings

- **Remote Sensing and Digital Image Analysis** (IIRS, ISRO DLP), Sep 2018
- **Fundamentals of Aquatic Remote Sensing** (UGA, NASA Webinar), Jul 2018
- **Ruby on Rails** (Training @CHARUSAT), Feb 2018
- **Open Data Science** (Workshop @IIT Bombay), Dec 2017
- **Google Android with Applied Computer Science** (Google Developer Student Club, CHARUSAT), Oct 2017
- **CCNA Routing and Switching – Module 1** (Cisco Networking Academy, CHARUSAT), Feb 2017
- **Programming and Data Structures and Algorithms with Python** (NPTEL – IIT Madras), Jul 2016 – Sep 2016
- **Cyber Security and OWASP Top 10** (Azure Skynet, IIT Hyderabad, @Vadodara), Jun 2016
- **Google Polymer** (GDG Vadodara, MSU), Feb 2016
- **Ethical Hacking, Level 1** (TechDefense Anand, @CHARUSAT), Sep 2015

Projects

• Deep Learning Aided Image Processing 1. Gender Identification of a Person from GAIT Energy Image (GEI) 2. Pneumonia Detection from Chest X-Ray Images using CNN *Mar 2019 – Present; July 2019 – Present* VIEW DETAILS	1. 'Every person has a unique GEI' – exploiting this fact and using the walking pattern of a person to uniquely identify him/her 2. Using chest X-Ray images' standard covariation to discriminate between normal and pneumonia affected cases	*Python, CNN, Deep Learning, GEI Generation, Video Frame Processing*
• Text Classification and Context Mining for Document Summarization (Research at IITB) | Deep Learning aided text alignment *Dec 2018 – Present* VIEW DETAILS	Categorically summarizing responses into a well formatted document by text classification and NLU for context mining. Exercising weak supervision over Wikipedia Articles and Talks to achieve contextual text alignment	*Python, BERT, NLP, word embedding, Machine Learning, Django*
• CyanoTRACKER (Research at UGA) | Deep Learning aided Satellite Image Processing *Jul 2018 – Present* VIEW DETAILS VIEW DETAILS	1. Real time map marker based on tweet location and keywords 2. Sentinel 3 Satellite Imagery Dashboard on GEE with different visualizations (True color, False color, NDVI, NDCI, CCD, SSC, PC3) 3. Pine Forest Mortality Rate prediction from various VIs subject to probable state change	*Python, Twitter API, JavaScript, Google Earth Engine, SNAP, CODA (ESA)*
• CHEERBOT (ML, NLP) *Sep 2017 – Jun 2018* VIEW DETAILS	A chatbot that analyzes the user's sentimental state and strikes up a cheerful conversation if the user is sad – Now a publication at IGI Global (book chapter)	*Python, NLP, NLTK, Voice Analysis, Machine Learning*
• CentralEased (ML, Face Recognition) *Feb 2018* VIEW DETAILS	An attempt to create a centralized database using machine learning over all existing databases of a person's information, based on his/her face picture as ID/ Primary Key	*Python, Flask, OpenCV, HTML, CSS, Machine Learning*
• Management Systems as Web Apps *Feb 2017 – Apr 2017; Jan 2018* VIEW DETAILS VIEW DETAILS	1. To automate the process of booking seminar halls in our university 2. To facilitate the process of acquiescing transcripts from universities for students staying far away	*HTML, CSS, Bootstrap, PHP, JavaScript*

Achievements

- Co-Founder Astronomy Club, Baroda High School ONGC (Affiliated by Astronomers Without Borders)
- Selected for final year project at U.R. Rao Satellite Centre, ISRO (Bangalore)
- Core Team Member – Developers Student Club run by Google, CHARUSAT
- Editor in Chief – 'The Quill', CHARUSAT's university magazine
- Won scholarships from college based on academic performance; TCS CodeVita; top 5000 for years 2017 and 2018
- Won numerous coding competitions by Computer Society of India, InApp and other Techfests (Footprints, Udaan)
- Successfully completed working projects with demonstration at Infostretch Corporation (Ahmedabad), Gujarat Hackathon, Vishwakarma Hackathon (Ahmedabad)
- Co-ordinated and organized various workshops and events at Gujarat state level (college techfest – Cognizance)