CHARU LATA

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Education	**UNIVERSITY OF HAWAII-MĀNOA**	**Honolulu, HI**

UNIVERSITY OF HAWAII-MĀNOA   **Honolulu, HI**
Master of Science (MSc), Computational Geophysics, December 2019   EAD: Feb 2020 – Feb 2023
CGPA: 3.89/4, East-West Center Alum, Student Athletes Mentor & Tutor

INDIAN INSTITUTE OF TECHNOLOGY-KHARAGPUR   **Kharagpur, India**
Integrated MSc, Geology and Geophysics, May 2015
College Basketball & Volleyball player, Techno-Management Fest Organizer

Tech Skills   SQL; MATLAB; Python: Numpy, Pandas, Sklearn, GraphLab, Seaborn; R; MS Excel VBA; Tableau

Projects
- *Sales Data Analysis:* Used data cleaning, wrangling and visualization techniques in **Python** to answer business questions for an online e-commerce company
- *Risk Hotspot Analysis:* Queried structured engineering insurance claim data, developed KPI's and made interactive **Tableau** dashboards shown to target clients which helped onboarding and increase annual revenue
- *Shoreline Prediction*: Used hierarchal linear regression to predict increasingly advancing shoreline of beaches (nested data) in **R**, which help policymakers develop an effective coastal development plan
- *Motor Insurance Claim Predictor:* Trained classification model with > 0.87 AUC to predict claim outcome on (unbalanced) user dataset in **Python**, thus identified potential claim producing policy holders
- *Data Visualization in Tableau: https://public.tableau.com/profile/charu.lata#!/*

Experience
2017 - 2019

UNIVERSITY OF HAWAII-MĀNOA (Global Top-10 Geosciences Program)   **Honolulu, HI**
Graduate Research Assistant, Graduate Teaching Assistant
Established research goals and led individual and team research to timely execution. (*Thesis*)
- Invited to present research at regional and international conferences: AGU-2018, REU-2019
- Taught and mentored 60+ undergraduate students by conducting daily training-feedback sessions and quantifying student's engagement, performance and behavioral metrics for assigning final grades
- Proposed and led funding for research project aimed at revamping 50 years old gravity repository of Oahu
  - Secured unanimous vote from 5-membered committee amongst 20 submitted proposals
  - Led a team of 2 in executing the project within 5 months by planning and communicating daily goals
- Developed first of its kind staggered-grid wave simulation algorithm with 30% less computation time and movie-recording feature using high order difference method and matrix manipulation technique in **Maltlab**
- Automated seismic event picking process for 8000+ events, thus reducing analysis time by days
- Offer of PhD extended after a year into the program

2016 - 2017

INDIAN INSTITUTE OF TECHNOLOGY-BOMBAY   **Mumbai, India**
Research Assistant, Department of Earth Sciences
- Implemented Ambient Noise Interferometry technique on ground-motion time-series data and communicated actionable goals to a major government owned oil and gas company

2015 - 2016

ICICI GENERAL INSURANCE (India's Largest Private Insurance Company)   **Mumbai, India**
Manager-Value Added Services (VAS)
Generated revenue and restructured operations in VAS by cross-functional collaboration.
- Increased client onboarding, retention and added >100,000 USD to annual revenue by leading product development of online dashboard aimed at facilitating real-time VAS tracking and enhance client engagement
- Increased client onboarding by 30% by introducing and promoting data-driven sales pitch powered with interactive data visualization **Tableau** dashboards and actionable insights
- Reduced decision time by 6-10 per week by introducing an interactive GUI to automate VAS recommendation and pricing catalog creation process, made using **MS Excel Visual Basic**
- *Mobile App-based Site risk inspection for SMEs*
  - Increased operational efficiency at near-zero cost, increased inspection numbers by 150%, and amassed digital data for generating 'Risk Scores' by facilitating application adoption
  - Derived metrics on **SQL** queried claim and risk score data, used multiple regression to predict claim amount for target client that helped sales team pitch mitigation products and services offered by ICICI Lombard

Awards
- *Harold Stearns Fellowship*, 2018: Secured research funding against 20 submitted proposals, given by the Geological Society of America (GSA)
- *AGU Travel Grant*, 2018: Shortlisted amongst a pool of 1000+ candidates to attend and present at American Geophysical Union (AGU) Fall meeting
- *ICICI Lombard, 2016*: Awarded with highest year-end rating amongst 18 peers based on KPI's
- *Inspire Scholarship*, 2010-15: Awarded for being in top 5% (amongst 0.3 million) of college students pursuing science field as major