Dilsher Singh Dhillon

I'm an applied statistician with expertise in applying both traditional and modern statistical methods to solve business problems. I'm an advocate for reproducible workflows and an avid user of R markdown documents and docker containers. I'm looking for opportunities where I can leverage my statistics training to quantify uncertainty to aid in better decision making.

🎓 Education

2015 | 2017

Texas A&M University
Master's in Statistics

📍 College Station, TX

Summa Cum Laude

2010 | 2012

Texas A&M University
Master's in Biotechnology

📍 College Station, TX

Cum Laude

2006 | 2010

Panjab University
Bachelor of Engineering

📍 Chandigarh, India

💼 Work Experience

March 2019 | Present

Shell International Exploration and Production
Statistical Consultant

📍 Houston, TX

- *Shell commercial products*

  - Help improve the line of products offered by Shell by assisting researchers with experimental design
  - Bespoke statistical analysis of experiments
  - Effective communication of results to stakeholders aiding in optimum decision making

- *Drilling operations*

  - Developed a well calibrated probabilistic map of a region of interest that indicates risk of encountering hazards
  - Provide statistical input to the business unit on decisions to turn work on/off

2018 | 2019

Baylor College of Medicine
Statistician

📍 Houston, TX

- *Identifying risk factors for poor outcomes in co-infected TB-HIV patients*

  - Worked with clinicians in Africa to extract longitudunal data for ~25000 subjects
  - Developed a statistical model to understand risk factors that are associated with poor TB outcome - which leads to better patient management guidelines for high risk countries.

- *Studying underlying epigenetic mechanism of TB infection*

  - Processed methylation data from EPIC arrays consisting of ~850,000 individual probes
  - Assisted physician researchers with bioinformatic analysis of methylation and flow cytometry analysis
  - Automated a pipeline in Python for merging of patient data from clinical research forms in eSwatini

2013 | 2018

MD Anderson Cancer Center
Research Investigator

📍 Houston, TX

- Promoted to a supervisory capacity to oversee assay development of novel biomarkers and testing of in-house and commercial assays in clinical samples for validation
- Managed the Specimen Manger database for recording subject characteristics, bio-specimen banking and inventory and multicenter study inventory for the Lung Cancer Early Detection trial

Contact

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🐦 dhillon_stats

🔗 Webpage

Skills

Statistics ∞

Generalized Linear Models
Heirarchical Models
Design of Experiments(DOE)
Bayesian Inference
Bespoke Statistical Models
Time-series Regression

Software ⑂

R, Python
Stan
Git version control
Building Docker images to containerize applications and analysis workflows
Building packages in R
Unit-testing
Shiny application development

Consulting 🤼

Experience in statistical consulting
Gathering key subject expertise from clients
Working closely with decision makers to frame relevant questions
Effective communication to non-technical audience

Permanent US Resident