Shruthi R Edmonton, Alberta | shruthi@ualberta.ca | https://www.linkedin.com/in/shr-r/

PORTFOLIO: https://shr100.github.io/ | **GITHUB:** https://github.com/shr100

INDUSTRY EXPERIENCE

Software Engineer

Neurotrack Technologies Inc.

May 2021 - Present

- As a **Backend Engineer**, worked on building **non-invasive cognitive tests** for the **early detection** of **Alzheimers** and **dementia**
- Conceptualized the idea of a coaching service to help customers improve their cognitive health, used by 100+ clients within the first 3 months.

Mitacs Accelerate Intern

Ethically Aligned AI

March 2021 - May 2021

- Analyzed literature across different domains in order to produce proof-of-concept for validating ethics.
- Collaborated with a diverse class of businesses to identify specific business needs for building fair machine learning systems.
- Strategized the implementation of a common tool for validating ethics.

Data Scientist Intern

Famwork

Dec 2020 – May 2021

- Leveraged analytical and data visualization techniques for integrating machine learning models into electronic health record systems and built a chatbot for the patient portal.
- Spearheaded the automation of the telehealth system for the minimum viable product and improved accuracy of the system to forecast diseases the patient was susceptible to acquire, by 80%.
- Strategized the improvement of customer satisfaction by 50%, by automating the EHR system.

Software Engineer Intern

Makesto Infotech Private Limited

May 2018 - Jul 2018

- Launched a JavaScript plugin, which was used internally for supporting 3D models in the GL Transmission Format.
- Established a framework for achieving dimensionality reduction of 3D models by 30%, with minimal data loss, in Python.
- Collaborated with a team of 10+ people to maximize retail sales at Target by 80%, incorporating 3D modeling.

Software Engineer Intern

Larsen & Toubro Technology Services

Jun 2017 - Jul 2017

- Utilized agile practices and developed the login, sign-up, and deposit pages for the company using HTML5, CSS3, and JavaScript.
- Participated in code reviews and collaborated with 5+ people to build a complex, scalable software system.
- **Perfected** the existing system by **improving security** against SQL injection attacks by almost 70%.

EDUCATION

M.Sc. Computing Science, University of Alberta, Edmonton.

Sep 2019 - May 2021

Aug 2015 – May 2019

B.E. in Computer Science, Anna University, Chennai, India

SELECTED PROJECTS

- Noise Eliminator in Active Learning (NEAL 2020). An algorithm to produce highly accurate machine learning predictions with a very low amount of training instances. Improved over previous systems by 30%. Python.
- Early Detection of Depression using text sequences (2019). A system that detects the early onset of depression using the RSDD dataset and processed using Natural Language Processing. Achieved an accuracy of 99%. Python.
- Assessment of geriatric frailty Internet of Things (2020). System to assess geriatric frailty using four smart devices which could be monitored from afar, developed for the company Withings. MongoDB, Python, React.js
- Patented Visual Aid System (2017). A Visual Aid storytelling system utilized in storytelling sessions for visually challenged children that consisted of an interactive computer and sensor system and when scenes from stories were fed to the computer, the sensors rose to depict the scene. Used by over 50+ schools. Java, MATLAB.

TECHNICAL SKILLS

Languages: Python, Java, C++, HTML, CSS, JavaScript, PHP

Libraries: NumPy, Pandas, Matplotlib, Scikit-Learn, Keras, NLTK, Gensim, spaCy, TensorFlow, PyTorch

Databases: MySQL

Tools: Jupyter Notebook, Google Colab, Github, Excel Platforms: Microsoft Windows, Ubuntu Linux, macOS AWS Tools: AWS Lambda, DynamoDB, Cloudwatch, Cognito