Vinay Kudari

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EXPERIENCE

- **Brave Orbit**   Capetown, South Africa
  Full Stack Developer   *Jan. 2020 - Aug. 2021*
    - Developed a cross-platform app using BLoC pattern, implemented database, network and state management layers
    - Designed HIPAA compliant scalable async push notification service for medication reminder application
    - Developed a task scheduler for clinical surveys that delivers email and SMS alerts and gathers response on a recurring basis
    - Developed a ERP system, custom features such as multi-product substitutions, combo-products are developed
    - Kubernetes CI/CD workflows were setup to automatically test, build and deploy backend services on cloud
    - Developed automated testing pipelines and improved test coverage for both frontend and backend services

- **Accenture**   Bangalore, India
  Big Data Developer   *Sep. 2018 - Dec. 2019*
    - PL/SQL procedures were developed to generate parent child hierarchies using temporal drug life cycle data
    - Time series analysis was conducted on drug assay data to identify raw materials that effects the drug quality
    - Designed parallel ETL data validation pipelines using microservice architecture; Manual testing resources were cut by 70%

- **Vishakapatnam Port Trust**   Visakhapatnam, India
  Computer Vision Intern   *May 2017 - July 2017*
    - Created datasets and trained a support vector machine with a Gaussian kernel to detect cargo class, estimate lease area size, and monitor for suspicious movement using the block matching algorithm

SKILLS

- **Languages**: Python, SQL, Bash, Dart, JavaScript, Java, HTML, CSS
- **Libraries**:   PyTorch, Django, PySpark, Pandas, NumPy, OpenCV, Matplotlib, Scikit, SQLAlchemy, Flask, Flutter, FastAI
- **Tools**:   Docker, Compose, Kubernetes, PostgreSQL, Redis, Sentry, Git, JIRA
- **Cloud**:   GCP, Heroku, AWS

RELEVANT PROJECTS

- **Smart Broker — Deep/Reinforcement Learning, Computer Vision, Time Series Analysis**
    - Designed OpenAI gym environment for crypto time series data, trained on visual technical indicators like RSI, MACD
    - Applied LSTM chained with CNN as function approximators to Actor Critic algorithms; ~10% returns were achieved

- **Vehicle Health Inspector API — Computer Vision, Deep Learning**   link
    - Trained segmentation model to detect damage and calculate health score; Deployed model as a REST API on GCP

- **DeepJet Autonomous Car — Deep/Reinforcement Learning, App Dev, Backend**   link
    - Assembled the car with Jetson Nano; Cross-platform mobile app was build using Flutter to control the bot remotely
    - Implemented WebSockets to exchange sensor data with the controller; Applying RL/DL algorithms to make it autonomous

- **HuggingFace Datasets — NLP**
    - Contributed couple of datasets to HuggingFace repository, was a core contributed during the open source sprint

EDUCATION

- **University at Buffalo [3.9/4]**   Buffalo, NY
  Master of Science in Computer Science   *Sep. 2021 – Present*

- **National Institute of Technology, Durgapur [3.3/4]**   West Bengal, India
  Bachelor of Technology in Computer Science and Engineering   *July 2014 – May 2018*

THESIS

- **Gender Classification Using CNN under Dr. Dakshina Ranjan Kisku**
    - Implemented Gil Levi and Tal Hassner's deep neural network architecture in PyTorch, tweaked the network layout, and evaluated various second-order optimisation techniques