HARMAN
A SAMSUNG COMPANY

Digital
Transformation
Solutions (DTS)

HARMAN DTS Global Internships

Advanced Technology and Business Internships

Delivering technology solutions to transform everyday experiences

A new piece of technology becomes indispensable when it easily integrates into our daily lives, addressing real needs in real-time. At HARMAN Digital Transformation Solutions https://services.harman.com/, we help visionary businesses to create such technology solutions. As a true innovation partner, we collaborate with you to understand ever-changing needs and make technology more dynamic to address them. Our 7,000 professionals working with 200+ clients from 45+ offices across 12 countries do not just create new hardware or software. Blending our expertise across physical, digital, industry domains, and people-first design helps us create technology solutions that transform the everyday. We call it HARMAN Life-ware. With HARMAN Life-ware, we do not just create software and hardware; we combine them to make technology more human. We deliver solutions from a people-first perspective to transform everyday lives. These solutions simplify complex tasks and connect people worldwide. By harnessing innovation, enhancing speed to market, optimizing costs, and enhancing user experiences, we elevate their daily grind to exciting events that make people wonder, "How did we ever live without these?"

As a true innovation partner, we collaborate with our clients to understand ever-changing human needs and make technology more dynamic to address them. Our expertise in moving from the physical to digital, backed by our teams' competencies across technologies and domains, helps us craft products and platforms with a design-led approach. We chart your digital transformation through a clear roadmap to success. To make technology more human, we take it beyond its superficial advancements. We ask what technology can do for you in

© 2022 HARMAN International | services.harman.com

creating people-first outcomes; we innovate to create solutions that change your end-users' daily lives for the better. The core team consists of digital strategists, business analysts, platform experts, cloud computing architects, quantum computing experts, software developers, product specialists, user experience designers, data scientists & business analysts.

HARMAN DTS Global Internship Program

Interns at HARMAN can make an impact with real work and network with brilliant professionals during their time with us. The Harman DTS Specialized Program Internship program https://jobs.harman.com/students make sure our interns receive a well-rounded experience in advanced technology and business areas. The interns we recruit bring with them personal attributes such as learnability, leadership capability, client focus, analytical, critical thinking skills, and the ability to communicate your ideas to technical and non-technical audience. Your responsibilities would include building solutions and frameworks in emerging technology and business areas. Ideate & create IP, build demonstrable innovative & path breaking PoC, prototypes, products, platforms, accelerators. You will be mentored by Global Product, Technology and Business Leaders and will drive the development and design of new platforms and capabilities in areas such as Mobility, Advanced Analytics, AI/ML, Quantum Computing, Cybersecurity, Big Data, Cloud Computing, Internet of Things, 5G, No-code Low-code development, Platform businesses, New Business Models, Vertical Specific Solutions, Open Innovation, Innovation Crowdsourcing and IP licensing.

No. of Internships on Offer	15 (10 Technology Internships & 5 Business School Internships)
Qualification	Bachelors (BTech., BEng.), Masters (MBA, MS)
Internship Duration	2 to 6 months
Internship Mode	Remote with periodic face to face meetings

© 2022 HARMAN International | services.harman.com

Project Descriptions of Technology Internships

Hospital Readmission Prediction

A hospital readmission is when a patient who is discharged from the hospital, gets re-admitted again within a certain period such as 30 days, after the discharge. Hospital readmission prediction involves learning from historical medical data to predict probability of a patient returning to hospital in a certain period after the discharge. The objective is to help health providers improve quality of care, deliver better treatment, lower hospital readmission rate, and reduce the medical costs. This project aims to achieve Interpretable & Explainable Machine Learning results for the following questions:

- How accurately can we predict hospital readmission?
- What factors are the strongest predictors of hospital readmissions in a certain disease category?

Video Patient Monitoring and anomaly detection

Enhancing patient safety while optimizing resources is a continued area of focus for the global health care environment. Sitters, or one-to-one observers, are commonly used in inpatient settings to meet monitoring needs of high-risk patients. Utilizing AI/ML based video analytics technology such as continuous video monitoring can relieve sitters to allow for optimal productivity, increased safety, cost reduction, and nurse/family satisfaction. The project involves building AI/ML driven video analytics module to monitor patients as well as surveillance of people in contact with the patient as well as the surrounding facilities. Once an anomaly id identified, the system should push them to the nursing staff.

Intelligent Document Processing

Globally about 80-90% of all data is unstructured. Insurance companies have a large and rapidly growing unstructured data content and many of them do not having the ability to make use of it to take the right business decisions. Unstructured content includes Policy Documents, Claims Documents, Annual Reports, Emails, Broker Submissions, Knowledge Repositories, paper documents etc. The Intelligent Document Processing engine executes document pre-processing using image analytics and readies the document for information extraction. The extracted data is them analysed using NLP techniques and corrected for errors, thereby ensuring an extremely high degree of data extraction accuracy. The engine checks for inter-field validity and flags values that occur with low confidence to call for manual intervention.

© 2022 HARMAN International | services.harman.com

Claims Analytics

Insurers rely on rule-based engines which raise alerts for Claims fraud in casualty insurance. A large team triages these alerts and select the candidate claims for further investigation. There is also the problem of False positives, where only a small percentage of the of the validated claims turn out to be actual fraudulent claims. Businesses can automate the triaging process with AI model validating Fraudulent claim alerts using multivariate data. Create features from the multivariate data along with the associated claims description (free text). Robust machine learning algorithms to create models with <0.2% false negatives and none of the actual fraudulent claims being missed. Reduce the number of alerts to be reviewed by the triage team by 90%. Incorporate model explainability.

Smart Medical Devices Management

Predictive Intelligence to monitor and predict the health of devices, based on usage and log data. The objective is to help the monitoring and maintenance team to get device intelligence data on a regular basis and predict and visualize the data so they can take preventive actions. Key features of the solution include Device Monitoring, Device Health Prediction, Workflow Management, Omni-channel support through cloud based always on dashboard. The intern will work on key features of the solution and build descriptive and predictive AI/ML models.

Cybersecurity Asset Management

HARMAN Cybersecurity Asset Management Platform helps enterprises keep their IT systems safe and secure using real-time threat intelligence analytics. The patent pending Cybersecurity Asset Management Platform analyses enterprise systems at the hardware, operating system, and application levels to discover security vulnerabilities, conduct risk scoring, classification, and automated remediation of vulnerabilities. This results in effective vulnerability scans, accurate discovery of vulnerabilities, enhanced compliance to security policies, reduced vulnerability patch response times, faster deviations discovery, reduced false positives through risk scoring powered by the cybersecurity intelligence engine, effective compliance analysis and reduced costs through automated remediation. This project involves working on key AI/ML modules of the platform including risk scoring, anomaly detection, NLP of vulnerability descriptions and automation of remediation.

© 2022 HARMAN International | services.harman.com

Project Descriptions of Business Internships

HARMAN Remote Care Platform

HARMAN Remote Care Platform is a connected care solution that gathers data to derive insights, can improve care delivery efficiency, increase patient engagement, and influence outcomes in a big way, outside of traditional clinical settings. Our solution can form the backbone of your virtual care strategy with patient data collection, contextualization, patient-provider communication, medication adherence, and more in the form of a highly secure, robust, and scalable platform. Project objective is to Identify Complementarities for the Platform, identify new use cases, reexamine the current pricing strategy, and identify new Growth levers for the Platform.

HARMAN Mediasuite

HARMAN Media Suite is an enterprise video content management platform to enable immersive webcasts and recorded video assets. It can provide organizations with streaming scalability. With a complete solution for Enterprise CDN (content delivery network) delivery, organizations can seamlessly optimize video sharing on their network or choose to leverage best-of-breed third-party content delivery solutions. The distributed architecture of Media Suite allows up to 50,000 web viewers to access it at the same time and supports recording for up to one hundred concurrent video sessions and streaming of up to fifty live events. Media Suite also offers tight integration with video conferencing solutions, allowing users to playback video-on-demand content into a multiparty meeting or conference room. Project objective is to Identify Complementarities for the Platform, identify new use cases, reexamine the current pricing strategy, and identify new Growth levers for the Platform.

HARMAN Intelligent Healthcare Platform

HARMAN Intelligent Healthcare Platform is designed to help healthcare and life sciences enterprises in their journey towards customer centric services by seamlessly transforming their data, analytics, intelligence, and governance functions in a secure, cost effective and privacy preserving manner. The project objectives are to work with the Product leader to define, benchmark and create and roadmap for Data Machine, Analytics & Visualization Machine, Intelligence Machine and Governance Machine.

HARMAN Cybersecurity Asset Management Platform

HARMAN DefenSight enables enterprises to keep their IT systems safe, secure, and compliant using real-time threat intelligence and automation. Defensight discovers security vulnerabilities, risk scores and classifies them and reduces vulnerability patch response times through automated remediation and prediction of vulnerabilities. DefenSight gathers data from various internal and external sources to validate the security threats of systems, leverages AI/ML and Graph analytics models to generate a risk score, identify vulnerable assets and predicts which other potential systems could be vulnerable. It recommends the right software intervention to solve the vulnerability and applies the software solution in an automated fashion. The project objectives are to define the market segmentation, positioning, partnership, and pricing strategy for the platform.

About HARMAN Digital Transformation Solutions (DTS)

HARMAN's Digital Transformation Solutions (DTS) is a strategic business unit dedicated in blending the physical and digital to make technology more dynamic in order to serve the ever-changing human needs. Our team of over 7,000 employees, spread across 12 countries in 45+ locations, with their expertise across hardware, software, and industry domains are constantly delivering cutting edge technology solutions to over 200 clients globally. HARMAN DTS aims towards helping customers deliver a holistic experience to their customers – through the convergence of digital, cross channel user experience, cloud, mobility, insightful data, and internet-of-things backed by scalable underlying IT platforms. Healthcare, telecom and industrial being our key focus areas, we have made significant investments into this space. Leveraging our global delivery approach, IPs, platforms and people, we deploy next generation technology platforms across industries, offer cost savings and deliver innovative solutions to help our clients on their digital journey.
To know more, please visit **https://services.harman.com**

About HARMAN

HARMAN (harman.com) designs and engineers connected products and solutions for automakers, consumers, and enterprises worldwide, including connected car systems, audio and visual products, enterprise automation solutions; and services supporting the Internet of Things. With leading brands including AKG®, Harman Kardon®, Infinity®, JBL®, Lexicon®, Mark Levinson® and Revel®, HARMAN is admired by audiophiles, musicians and the entertainment venues where they perform around the world. More than 50 million automobiles on the road today are equipped with HARMAN audio and connected car systems. Our software services power billions of mobile devices and systems that are connected, integrated and secure across all platforms, from work and home to car and mobile. HARMAN has a workforce of approximately 30,000 people across the Americas, Europe, and Asia. In March 2017, HARMAN became a wholly-owned subsidiary of Samsung Electronics Co., Ltd.

Reach us on

© 2022 HARMAN International | services.harman.com