Abinash Pant

linkedin.com/in/abinashpant
abinashpant.com.np
me@abinashpant.com.np
+49 (0)176 67126801
Aachen, Germany

Software Engineer | Machine Learning

Professional Experience

Today – January 2022 | **Software Engineer**
Amazon, AGI - Modeling Services, Aachen, Germany
- Developed deep learning toolkits for Automatic Speech Recognition in Alexa.
- Led a project to increase code coverage, optimized testing strategies, and reduced costs.
- Transitioned infrastructure and CI/CD pipeline to SageMaker for efficiency and cost-effectiveness.
- Automated deployment of neural language models to production.
- Spearheaded implementation of telemetry for deep learning tools, enhancing usage and cost clarity.
- Actively shaping engineering advancements for the LLM initiatives.

Python | PyTest | TensorFlow | PyTorch | Sagemaker | EKS | Docker

December 2021 – September 2015 | **Software Engineer / Researcher**
BESA GmbH, Munich, Germany
- Conducted independent research on ”Developing automatic segmentation algorithms for MRIs of children” as a Marie Skłodowska-Curie research fellow.
- Conducted research and development for medical research software for EEG, MEG, and MRI analysis.
- Contributed to the entire product life cycle, from design and development to release.

Python | Theano | C++ | Visual Studio | Perforce

May 2013 – August 2011 | **Member of Technical Staff**
Spot, Inc., Bangalore, India
- Built a search and organization platform for personal cloud data.
- Conducted concept development and rapid prototyping.
- Contributed to the full product life cycle from design and development to app store deployment.

Objective C | Python | X-Code | MySQL

July 2011 – June 2010 | **Software Developer**
MakeMyTrip.com, Gurgaon, India
- Designed and developed back-end services and web-based solutions related to the travel domain.
- Designed and implemented a Finite-state machine solution to streamline operations.

C# | .NET | Microsoft Dynamics | RightNow CRM

Education

July 2015 – September 2013 | **Masters in Computer Vision**
Université de Bourgogne, Le Creusot, France

April 2010 – May 2006 | **Bachelor of Technology, ECE (Full-ride scholarship)**
NIT Allahabad, Allahabad, India

Competencies

Technical Skills | Python, C/C++, SQL, TensorFlow, PyTorch, SageMaker, Amazon EKS, Docker, Git
Interest | Machine Learning, Software Development, Research, MLOps

Projects

Developing automatic segmentation algorithms for MRIs

2015 - 2020

BESA GmbH & University of Münster, Germany
Researched and implemented state-of-the-art segmentation techniques for head MRI segmentation. Developed novel 3D CNN techniques for head segmentation. Created a pipeline for generating head models using segmentation for effective 3D head modeling. Validated the developed method and modeling pipeline on a standard dataset. Presented findings at multiple conferences, including an oral presentation

Marie Curie Fellowship | MRI | Segmentation | 3D CNN | Deep learning

Multi-scale Patch-Based Hippocampus Segmentation

2015

CSIRO Brisbane, Australia
Investigated algorithms proposed in the literature for hippocampus segmentation. Developed an efficient multi-scale patch-based automated pipeline for hippocampus segmentation. Published two papers related to this work.

Master Thesis | Travel grant | Segmentation | Multi-scale | Patch-Based

ASMA (Automatic Shopping Mall Assistant)

2014 - 2015

Université de Bourgogne, Le Creusot, France
Built a robot with capabilities such as voice control, face recognition, visual servoing, and tag detection. Gained in-depth knowledge of robot navigation, control, and vision using ROS and TurtleBot.

Robotics Project | Robotics | Voice Control | Face Recognition | Visual Servoing | Tag Detection | ROS | TurtleBot

Human Pose Estimation for the Operating Room

2014

IRCAD Institute in University Hospital of Strasbourg, France
Developed a multi-sensor vision system to perceive and model clinician and staff activities in operating rooms. Estimated human poses for radiation monitoring using multiple RGB-D cameras to improve results.

Summer Internship | Human Pose Estimation | Multi-Sensor Vision System | RGB-D Cameras | Operating Room

Languages

Nepali	●●●●●
English	●●●●○
Hindi	●●●●○
German	●●○○○
French	●○○○○

Scholarships & Awards

- Marie Skłodowska-Curie research fellow.
- International travel grant for Master thesis.
- Full-ride scholarship from the Indian Government.
- Won multiple technical and coding awards at national-level technical festivals.
- Lifetime Member of MENSA India.