# VINIT TODAI

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#### **EDUCATION**

Northwestern University, USA

Master of Science in Artificial Intelligence

University of Mumbai, India

Bachelor of Technology in Computer Engineering

**Sep 2021 – Dec 2022(Exp.)** 

GPA: 4.0/4.0

Aug 2015 - Jun 2019

GPA: 8.48/10

#### **TECHNICAL SKILLS**

Languages: Java, Python, C++, MySQL

Web Technologies: Microservices, Spring, Hibernate, RESTful API, JSON, HTML, CSS, Javascript, Angular, Node.js

Frameworks/Tools:, Git, Eclipse, IntelliJ, Jenkins, Openshift, SonarQube, Jira, Agile Central

## **EXPERIENCE**

## Barclays Global Service Centre, Pune, India

Jul 2019 - Aug 2021

Software Engineer, Barclaycard UK

- Developed REST APIs for iPortal, which provides a single point of access to all Barclays Corporate Banking services, impacting over 200,000+ users globally (Java, Spring, Hibernate, MySQL)
- Played a vital part in the end-to-end delivery of 5 APIs following an agile project development methodology, right from requirement analysis, development, unit and integration testing, deployment and final release
- Directed a team of 8 engineers for the development of 'Assist', a platform that connects task publishers—who have an innovative idea, and task contributors—who want to acquire new skills, saving 762+ man-hours annually, with 230+ users across Barclays (Java, Spring, Hibernate, MySQL, Angular)
- Spearheaded the InnerSource initiative to reuse software modules in projects across the department by unifying with 'Assist', where colleagues can contribute by hosting a workshop or publishing a blog on how to reuse their project code

#### **PROJECTS**

# Brain Controlled Wheelchair [Demo] | University of Mumbai, India

- Led a team of 3 researchers to develop a brain-controlled wheelchair with 98% accuracy by reading brainwaves with an EEG headset and streaming data to an Android app that interprets brainwaves and translates them into commands
- Integrated the system with a Raspberry Pi based wheelchair, and implemented obstacle detection and avoidance using Tensorflow Mobile; lowering the potential cost from \$2000 to \$400

# AirMusic-Generate Music with your moves [Demo] | Tensorflow World Hackathon

Developed a real-time music production system that uses a camera to evaluate 17 human pose keypoint, estimates human postures with Posenet, a Tensorflow Deep Learning model, and maps them to melodies from piano and drums

# GestureAssistant [Demo] | Global PyTorch Hackathon

Developed a virtual assistant in Python that uses Pytorch to turn 5 gestures into desktop commands in real time, such as opening a browser, Microsoft Word, or launching a video player, automating the desktop without the need to click a key

## BrainPort - A VR Journey with your Brain [Demo] | Facebook DevC Challenge

Designed a VR environment in React 360 and integrated it with a brainwave headset, analyzing 5 brainwave bands in real time and teleporting the user to 4 different locations in the virtual world with his thoughts, such as a beach or mountain

## LEADERSHIP / EXTRACURRICULAR

## Maker Relations Officer | Maker Mela Core Team, RiiDL

Aug 2016 - Jan 2018

- Interacted with 1000+ innovators, startups, and technology leaders from across the globe and collaborated with 20+ makerspaces, providing them a platform to showcase their inventions at Asia's largest Innovator Gathering—Maker Mela)
- Supervised a team of 5 and collaborated with multiple other teams to organize Maker Mela for 2 consecutive years, with 200+ innovators and 50,000+ visitors from across the world

# **HONORS AND AWARDS**

- Keynote Speaker, Hackathon Winner [Link]—MongoDB World '19, New York (900+ participants from 22 countries)
- 5th Place, AWS DeepRacer League—A self-driving car race driven by ML, conducted at Barclays (200+ participants)
- Finalist, India Innovation Challenge Design Contest, a Tech-Startup competition arranged by the Govt. of India, Texas Instruments and IIM Bangalore, for the project Brain Controlled Wheelchair (Top 30 from 26,511 participants)
- Featured on front page of Maharashtra Times, India's largest selling newspaper, for project Brain Controlled Wheelchair