



VENISH PATIDAR

Email: venishpatidar@gmail.com | Phone: [+91 \(83198\)-\(74206\)](tel:+91(83198)-(74206)) | Website: www.venishpatidar.com

GitHub: [@venishpatidar](https://github.com/venishpatidar)

EDUCATION

- **Arizona State University**, Tempe AZ, USA Present
Master of Science, Computer Science
- **Medi-Caps University**, Indore, India August 2018 – May 2022
Bachelor of Technology, Computer Science & Engineering **Overall CGPA: 3.54 / 4.0**

PUBLICATIONS

BOOKS:

- Venish Patidar, 1 October 2022, “**Developers guide for building own Neural Network Library**: A mathematical journey in creating the neural network library in C++.” <https://books.google.co.in/books?id=Ho-WEAAAQBAJ> ↗

RESEARCHES:

- Venish Patidar, Prof. Preetesh Purohit “**Multidimensional Neural Network**: Heterogeneous Activation Function on Same Neural Layer,” SSRN: <http://dx.doi.org/10.2139/ssrn.4171522> ↗

RESEARCH EXPERIENCE

- **Emorphis Technologies, Correlation between logs and failure of a project**, Intern Researcher, supervisor Mr. Pavan Patidar.
Derived an early indication based on the pattern of log messages that can indicate the likely imminent failure of a function.
- **Medi-Caps University, Multidimensional Neural Network**, Undergraduate Researcher, guide Prof. Preetesh Purohit.
Proposed a new ANN architecture that made the loss converge swiftly in almost **50%** of the early epochs than traditional ANNs.
- **Medi-Caps University, Neural Music Reminiscence**, Undergraduate Researcher, guide Prof. Preetesh Purohit.
Devised an ANN model using GANs that could generate a musical track with a hint of the well-known singer’s voice and style.

WORK EXPERIENCE

Machine Learning Engineer Intern, Emorphis Technologies January 2022 — June 2022

- Researched, designed, and worked on a Python module, Labeller.py, that labels company logs and sets category tags for the error, warning, and standard logs.
- The resulting labeling reveals the link between patterns of errors and release dates for similar projects.

Machine Learning Engineer Intern, Outworks Solutions Pvt. Ltd. May 2021 — October 2021

- Worked on a sentimental analysis project that analyses employees’ emails and slack messages.
- It reduced the time taken to review & analyze employee happiness, positivity, and productivity by 20% while tripling efficiency.

PROJECTS

Portfolio link: <https://venishpatidar.com/Projects> ↗

Academic Projects:

- **Neural Music** | Python TensorFlow Django (backend API) React (front-end) Jupyter (Model training)
<https://github.com/venishpatidar/NeuralMusic> ↗
 - Neural Music comprises four different NLP neural network models running on the python Django server and is accessible through a webpage. All four are implemented using TensorFlow and integrated into the Django backend server.
 - Each neural network was trained in a Jupyter notebook, and then the trained weights were uploaded to the models integrated on the Django backend server, which serves the results to the Neural Music web page via REST APIs.
- **Self-driving Car in GTA V** | Python PyCharm OpenCV TensorFlow
 - Developed an AI program that could self-drive for **2 minutes** before hitting obstacles in the computer game GTA V.
 - Written in Python and used OpenCV to capture frames, generate datasets, and TensorFlow for transfer learning on AlexNet.

Personal Projects:

- **Biller.exe** | Windows exe software | electron.js
<https://venishpatidar.com/Projects/biller> ↗
 - Developed a windows software that calculates the price of gold or silver items, adds the tax, subtracts the discounts, and generates and stores the printable bill .
 - Used electron.js to build the software with multilingual support for printing English or Hindi bills.
- **Kukshi Info** | React-native | Firebase | MongoDB | Expo SDK
<https://play.google.com/store/apps/details?id=com.kukshiinfo.android> ↗
 - Designed and developed Kukshi Info during Covid-19, containing the contact number, addresses, and information of all the doctors, medical stores, government officers, and business and other town services.
 - There are currently over **1,500+** active users utilizing the app's benefits.
- **React-native-gradient-icon** | Typescript | node.js | open source
<https://www.npmjs.com/package/react-native-gradient-icon> ↗
 - Written in Typescript, an open-source npm package, aims to provide linear and radial gradient color-filled icons in react-native, which previously react-native lacks this functionality.
 - The package is used in many projects and has **150+** weekly downloads.

HONORS, AWARDS & ACHIEVEMENTS

- 2022 Certificate of Appreciation, Municipality of Kukshi, in recognition of converting the town into an E-town via the Kukshi Info mobile application, which helped 2000+ people during the covid-19 lockdown.
- Awarded second place, Neural Music represented the University's CSE department's achievement in the intra-department show.
- My self-driving AI in GTA V took first place and cash of Rs. 4,000 in the Medi-Caps University hack-on-hackathon.

LEADERSHIP & VOLUNTEER EXPERIENCE

- 2022, Hosted a webinar on zoom for sophomore students, educating them about Deep learning, AI, and its application.
- 2021, Head of the organization committee, "CODE-TUSSLE," a 36-hrs hackathon for sophomores.
- 2019, Volunteered as a tutor for the NGO "ASHA," facilitating the growth of underprivileged kids and helping them understand Maths and English in a better way.
- 2018-2022, Elected four times in a row as a class representative.

SKILLS

- **Programming Languages:** C, C++, Java, Python, Prolog, R, Node.js (JavaScript, TypeScript), Swift, Kotlin, Jetpack Compose
- **Fullstack web dev:** React, React-native, Redux, HTML-5, CSS, Express.js, Electron.js, Django, Flask, MongoDB, MySQL
- **DevOps:** Azure, AWS, Firebase, Docker, Jira, Slack, Git
- **Technical Skills:** Deep Learning, Machine Learning, Unreal Engine 4, TensorFlow, CMake, Dynamic programming, Software engineering, Web development, UX design, Mathematics-Statistics

CERTIFICATIONS

- **Deep Learning Specialization** | Deeplearning.ai/Coursera | coursera.org/verify/specialization/3FEV2MNENLWV ↗
- **Meta Android Developer** | Meta | coursera.org/verify/professional-cert/RX3887U3KLYP ↗
- **Fullstack web development Specialization** | Coursera | coursera.org/verify/specialization/53ACF96HWP6Y ↗
- **Unreal Engine C++ developer** | Udemy | [UC-cafc4331-e271-42b9-81f0-105a261161c4](https://www.udemy.com/course/unreal-engine-cplusplus-developer/) ↗
- **Google IT Automation with Python** | Google | coursera.org/verify/professional-cert/WDTDK3CVN6HE ↗
- **DeepLearning.AI TensorFlow Developer** | Deeplearning.ai | coursera.org/verify/professional-cert/VA5L36WBB6SV ↗