

# Dhruv Vyas

319-930-7029 | [dhruv.m.vyas@gmail.com](mailto:dhruv.m.vyas@gmail.com) | [LinkedIn](#) | [Github](#)

## SUMMARY

---

Experienced software engineer with over 5 years of diverse experience spanning software engineering, data science, and applied machine learning. Strong communicator recognized for fostering collaboration among interdisciplinary teams, delivering impactful solutions at the crossroads of technology and data-driven decision-making

## TECHNICAL SKILLS

---

**Languages:** Python, Java, Swift, SQL, C, C++

**Developer Tools:** Git, Docker, Google Cloud Platform, AWS, VS Code

**Libraries:** TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, Matplotlib

## EXPERIENCE

---

### Postdoctoral Research Scholar

Jan 2023 - Present

*University of Iowa*

*Iowa City, IA*

- Leveraged cutting-edge technologies, such as smart glasses and watches, to collect 6000+ data points to drive significant advancements in the field of hearing healthcare
- Formulated a multi-modal machine learning model to improve diagnostics and treatments related to hearing healthcare

### Data and Operations Research Scientist Intern

May 2020 - Aug 2020

*Principal Global Investors*

*Remote*

- Designed the tools for standardizing ETL pipelines that were adopted by 8 internal teams at the end of the internship
- Led the efforts in modernizing and establishing standardized data science pipelines across the department

### Graduate Research Assistant

Jan 2017 - Dec 2022

*University of Iowa*

*Iowa City, IA*

- Led a research initiative dedicated to creating algorithms that reduced the time needed for hearing aid personalization by 50%
- Designed and maintained smartphone applications and data collection infrastructure to enhance research pertaining to cochlear implants, accumulating data from over 1000 participants
- Constructed machine learning models for forecasting hearing outcomes using user surveys and hearing aid data

### Sr. Embedded Engineer

Jan 2014 - Jul 2016

*Archana Automation*

*Gujarat, India*

- Streamlined and expanded single-board computer-based HMI products
- Introduced data logger product line for industrial applications

## EDUCATION

---

### University of Iowa

Iowa City, IA

*Doctor of Philosophy in Computer Science*

*Aug 2016 - Dec 2022*

### Birla Institute of Technology and Science - Pilani

Goa, India

*Master of Engineering in Embedded Systems*

*Aug 2011 - Aug 2013*

### Dharmsinh Desai University

Gujarat, India

*Bachelor of Engineering in Electronics Engineering*

*Jul 2007 - May 2011*

## MISC PROJECTS

---

### QEMU Raspberry PI Kernel | *C, Qemu, Virtualization, Kernel building, Git*

- Furnished tools for the compilation of QEMU Linux kernels ([Github repo](#))

### Raspberry Pi Libmodbus | *C, Buildtools, Git*

- Modified existing libmodbus library to support half-duplex RS-485 communication ([Github repo](#))