KISHAN REDDY NAGIREDLA

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SUMMARY

A highly motivated and hard-working PhD. candidate with a strong background in Robotics and Mechatronics Engineering, seeking to apply research and development skills to innovative robot systems.

EDUCATION

Doctor of Philosophy (2021 – Present**)**
Applied Artificial Intelligence Institute, Deakin University
Implementing novel machine learning algorithms to learn design and control together for robots, using PyTorch libraries and popular codebases.

Masters in Robotics and Mechatronics (2017-2019**)**
RMIT University
Designed, developed and 3D printed a mechatronic gripper capable of handling eggs without dropping or crushing.

Bachelors in Electronics Engineering (2012-2016**)**
Andhra University**,** India
Developed an early fire-detection system for train cabins.

SKILLS

Python	●●●●○
C++	●●●○○
ROS	●●●○○
Linux	●●●●○
Prototyping	●●●●●

WORK EXPERIENCE

06/2023 to 10/2024 **Sessional Academic**
Deakin University – Geelong, Victoria

- Delivered 30+ tutorial sessions in Software Deployment, Data Structures & Algorithms, Robotics and Computer Vision courses.
- Created and adapted 5 course materials with practical examples to enhance student learning.
- Provided constructive feedback to 50+ students per semester, resulting in a 15% average improvement across assignment scores.
- Facilitated interactive discussions and problem-solving sessions to strengthen understanding complex concepts.

04/2020 to 09/2021 **Vision Systems Engineer**
Australian Machine Vision Pty. Ltd. – Frankston, Victoria

- Led automation efforts in Bosch's deployment of a 16-line COVID test

kit manufacturing system to Ellume Health.

- Authored and optimized technical user manuals, streamlining client onboarding by 25% across multiple high-profile projects.
- Collaborated with 3+ teams through weekly face-to-face meetings and Git-based version control, managing multiple concurrent projects.
- Integrated vision systems and testing pipelines for label identification and segmentation in fast moving images across 4 projects.
- Designed and implemented 5+ mechanical structures for cameras, lighting solutions and electrical housing, enhancing system effectiveness and personnel safety.

07/2019 to 12/2021 **Robotics Engineer**
Exaptec Pty. Ltd. – Lilydale, Victoria

- Prepared detailed mechanical designs and CAD drawings for 3+ new add-on components for social robots including Temi and Beam.
- Developed standard operating procedures (SOPs) for robot testing, reducing debugging time by 30% in some cases.
- Managed integration of robots in client workspaces, writing Python, Android Studio-based applications for seamless deployment.
- Developed user manuals and technical documentation for 3+ robot applications, reducing client onboarding time by 20%

ACCOMPLISHMENTS

- **Best Poster Presentation Award Runner up** at Australasian Joint Conference on Artificial Intelligence, Melbourne (2024).
- **Best Hack Award Winner** for developing an AR experience for Wilsons Transformers Company in the ThingWorx AR + IoT Hackathon@RMIT (2018).

REFERENCES

- Nicci Rossouw
  CEO
  Exaptec Pty. Ltd.
- Dr. Santu Rana
  Associate Professor
  A2I2, Deakin University
- Ken Razga
  Director
  AMV Pty. Ltd.