

# Chandan Kumar - Curriculum Vitae

Chandan Kumar

```
r format(Sys.Date(), '%Y-%m-%d')
```

## My Curriculum Vitae

You can download a PDF version of my CV [here](#).

```
<p> /* import fonts */ <span class="citation" data-cites="import">@import</span> url('https://fonts.googleapis.com/css2?family=Public+Sans:wght@300;400;500;700&amp;display=swap')</p> <p> /* all formats */ </p> <p>.cvdate { float: right; font-style: italic }</p> <p>.print-only { display: none; }<em>color: aquamarine;</em>/</p> <p> /* adapt stylesheet for print from: https://github.com/quarto-dev/quarto-cli/discussions/2538#discussioncomment-4081842 */</p> <p> /* for page-breaks use style spans page-break-before: always; page-break-after: always; */</p> <p><span class="citation" data-cites="media">@media</span> print { <span class="citation" data-cites="page">@page</span> { size: a4 portrait; counter-increment: page; <span class="citation" data-cites="bottom-center">@bottom-center</span> { content: counter(page) } } .no-print { display: none; } .print-only { display: block; }</p> <p>.contact-block { margin-top: 0%; text-align: center; }</p> <p>html { font-family: 'Public Sans', sans-serif; }</p> <p>header { margin-block-end: 5em; } header h1.title { display: none; } header .author { font-size: 1em; font-weight: 600; color: black; text-align: center; margin-block-end: 0em; margin-bottom: 0; text-transform: capitalize; }</p> <p>h2 { font-weight: 600; text-transform: uppercase; /* color: blueviolet; */ }</p> <p>h3 { font-weight: 500; text-transform: uppercase; /* color: green; */ }</p> <p>p { font-size: small; }</p> <p>ul li { font-size: smaller; }</p> <p>a { text-decoration: none; font-weight: 500; color: #36a7e9; }</p> <p>qmd from cv</p> <div class="print-only contact-block"> <p>chandan@iastate.edu</p> <!-- # Chandan Kumar --> <h2 id="contact-information">Contact Information</h2> <ul> <li><strong>Email:</strong> chandan1002@gmail.com</li> <li><strong>LinkedIn:</strong> <a href="https://www.linkedin.com/in/chandan1002/">chandan1002</a></li> <li><strong>GitHub:</strong> <a href="https://github.com/chandan1002">chandan1002</a></li> </ul> <h2 id="education">Education</h2> <h3 id="iowa-state-university-usa">Iowa State University, USA</h3> <ul> <li><strong>Degree:</strong> Doctor of Philosophy (Ph.D.), Computer Science (Focus: Deep Learning, Computer Vision)</li> <li><strong>Advisor:</strong> Dr. Ali Jannesari and Dr. Matthew Darr</li> <li><strong>Graduation Year:</strong> May 2025</li> </ul> <h3 id="iowa-state-university-usa-1">Iowa State University, USA</h3> <ul> <li><strong>Degree:</strong> Master of Science, Computer Science</li> <li><strong>Advisor:</strong> Dr. Ali Jannesari</li> <li><strong>Graduation Year:</strong> Dec 2022</li> </ul> <h3 id="bit-sindri-india">BIT Sindri, India</h3> <ul> <li><strong>Degree:</strong> Bachelor of Technology in Computer Science (With Distinction)</li> <li><strong>Graduation Year:</strong> June 2015</li> </ul> <h2 id="work-experience">Work Experience</h2> <h3 id="iowa-state-university">Iowa State University</h3> <ul> <li><strong>Position:</strong> Graduate Research Assistant</li> <li><strong>Dates:</strong> January 2023 - August 2024</li> <li><strong>Description:</strong> <ul> <li>Skills Used: Python, Pytorch, CUDA, bash scripts, slurm.</li> <li>Unsupervised Learning approach to Object-Detection. Developed fully unsupervised learning based object detection algorithm using contrastive learning.</li> <li>Unsupervised Image retrieval. Developed algorithm to retrieve image using unsupervised learning.</li> <li>Scaling Unsupervised Learning algorithm to HPC(High Performance Computing).</li> </ul></li> </ul> <h3 id="hagie-manufacturing-john-deere">Hagie
```

Manufacturing (John Deere) </h3> <ul> <li><strong>Position:</strong> Data Scientist Coop</li> <li><strong>Dates:</strong> January 2022 - January 2023</li> <li><strong>Description:</strong> President award winner for extraordinary performance.</li> <li>Skills Used: Alteryx, Ignition SCADA, Databricks, PowerBI, Microsoft Excel, AWS, RabbitMQ, Python, OpenCV, Pytorch.<br /> </li> <li>Using tools and techniques to perform Text Mining, ML models development for predictive analysis and automation and Computer Vision models.</li> <li>Design and develop project pipeline(Data Exploration, Sampling, Feature Engineering, Model Building, Field Performance Evaluation).</li> </ul></li> <h3 id="iowa-state-university-1">Iowa State University</h3> <ul> <li><strong>Position:</strong> Graduate Research Assistant</li> <li><strong>Dates:</strong> January 2019 - December 2021</li> <li><strong>Description:</strong> <ul> <li>Skills Used: CAN-Bus, Python, OpenCV, POE, Pytorch, ROS</li> <li>Developed real-time driver assist system for large farm-vehicles. Involved a system of 16 cameras, edge computing and image stitching to utilize the CAN protocols and integrate the mechanism to existing system.</li> <li>Real-time depth detection and analysis using stereo camera(s). Used stereo camera to develop algorithm that can perform real-time depth detection and calculate volume of objects from the drone.</li> </ul></li> </ul> <h3 id="iowa-state-university-2">Iowa State University</h3> <ul> <li><strong>Position:</strong> Graduate Teaching Assistant</li> <li><strong>Dates:</strong> January 2017 - May 2019</li> <li><strong>Description:</strong> <ul> <li>COMS 1060 (Introduction to programming using HTML5, CSS, PHP, SQL, JQuery, JavaScript). Responsible for helping students understanding concepts, clearing their doubts and grading assignments.</li> </ul></li> </ul> <h3 id="exlinductis-services-india-pvt.-ltd.">EXL(Inductis) Services India Pvt. Ltd.</h3> <ul> <li><strong>Position:</strong> Business Analyst</li> <li><strong>Dates:</strong> February 2016 - December 2016</li> <li><strong>Description:</strong> <ul> <li>Awarded Rising Star Award (1 of 6 awardees out of 37,000+ employees)</li> <li>Skills used: SAS, SQL, IBM-Netezza, DB2, Tableau, R, Python, Microsoft Excel.</li> <li>Utilized applications like SAS to identify trends and relationships between different pieces of data, draw appropriate conclusions and translated analytical findings.</li> <li>Created and worked on various reporting frameworks (Microsoft Excel, Tableau) that involved customer segmentation and clustering exercises for customers</li> </ul></li> </ul> <h2 id="skills">Skills</h2> <ul> <li>Languages and Tools: Python, Java, OpenCV, Pytorch, CUDA, Databricks, Ignition, Alteryx, AWS, Jenkins, IoT, Git, Unix</li> <li>Web Technologies: HTML, CSS, React, AngularJS, NodeJS.</li> </ul> <!-- ## Projects --> <!-- ## Project 1 --> <!-- - \*\*Description:\*\* Brief description of the project. --> <!-- - \*\*Technologies Used:\*\* List of technologies used. --> <!-- - ... --> <!-- ## Project 2 --> <!-- - ... --> <!-- ## Certifications --> <!-- - Certification Name 1 --> <!-- - Certification Name 2 --> <!-- - ... --> <h2 id="awardsgrants">Awards/Grants</h2> <h3 id="access-grant-supported-by-nsf-cis220069">ACCESS grant supported by NSF (CIS220069)</h3> <ul> <li><strong>Description:</strong> Develop algorithm for Unsupervised Object Detection.</li> <li><strong>Position:</strong> Co-PI.</li> <li><strong>Grant Amount:</strong> USD 174,000.</li> </ul> <h2 id="professional-service">Professional Service</h2> <h3 id="invited-speaker">Invited Speaker</h3> <ul> <li><strong>Description:</strong> International 7-in-1 Symposium, CGC, Herning, Denmark.</li> </ul> <h3 id="reviewer">Reviewer</h3> <ul> <li><strong>Conference:</strong> ECCV 2024.</li> <li><strong>Conference:</strong> ICML 2024.</li> <li><strong>Conference:</strong> ICLR 2024.</li> <li><strong>Conference:</strong> NeurIPS 2023.</li> <li><strong>Journal:</strong> Journal of AI Research (JAIR).</li> <li><strong>Journal:</strong> River Publishers.</li> </ul> <h2 id="professional-memberships">Professional Memberships</h2> <ul> <li>IEEE</li> <li>IEEE Computer Society</li> <li>Cohere for AI</li> </ul> <h2 id="attachments">Attachments</h2> <h3 id="resume">Resume</h3> <ul> <li><strong>Description:</strong> Click <a href="CVChandan.pdf">here</a> to view my resume.</li> <li><strong>embed:</strong> CVChandan.pdf</li> </ul> </body> </html>