

# Pranay Mandadapu

<https://github.com/sunnypranay> | [mandada2@uwm.edu](mailto:mandada2@uwm.edu) | <https://www.linkedin.com/in/pranaymandadapu>  
+1-414-628-8883 | 2526 North Farwell Avenue, Milwaukee, Wisconsin – 53211

---

## Skills:

**Programming Languages:** Python, Java, C++, C, JavaScript, HTML, CSS.

## **Web Development & Frameworks:**

**Frontend:** Angular, React | **Backend:** Spring Boot, Django, Flask | **Web Technologies:** Rest API Development, Docker, Kubernetes, Ajax

## **Data Science & Databases:**

**Libraries:** TensorFlow, Pandas, NumPy | **Databases:** MYSQL, SQL, Mongo DB, Oracle | **Visualization:** Power BI, DAX

**Cloud Technologies & Certifications:** AZ-900, AI-900, DP-900, Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform (GCP)

---

## Education

**Computer Science** - Master's Degree, University of Wisconsin Milwaukee – **GPA – 3.88/4.0.**

*January/2022 - December/2023*

**Computer Science** - Bachelor's Degree, GITAM University, India – **GPA – 3.86/4.0**

*June/2016 – June/2020*

---

## Experiences

**Software Engineer - Financial Systems, University of Wisconsin-Milwaukee, Wisconsin.**

*February/2022 - Current*

- **OCR (Optical Character Recognition) Solutions & Document Validation:** Prototyped an OCR (Optical Character Recognition) solution with **Python** and **TensorFlow**, streamlining financial document interpretation. Crafted a **local client**, projecting an **80% surge** in efficiency during document approval processes against university standards.
- **Employee Record Creation:** Streamlined the budget funding portal through a custom-designed Chrome extension using **JavaScript**, integrated with a **Python Django** local web server **API**. This initiative led to a **95% speed-up** in record generation and significantly boosted financial data precision.
- **Email Data Mining:** Developed a **Python**-driven solution using **Pandas** to extract pivotal financial information from over 1600 emails, enhancing Excel report generation with a **75% efficiency uptick** over manual techniques.

**Data Visualization Intern, Kohler Co., Milwaukee**

*June/2023 - August/ 2023*

- **Platform Health Metrics & Visualization:** Spearheaded the development of health metrics for Salesforce, Velocity, and VIS (Global Kohler Plants) platforms, utilizing **Power BI** to interpret over 400k records—this enhancement elevated pipeline monitoring **efficiency by 60%** and expedited senior management decision-making processes.
- **Reliability Metrics & Strategy Influence:** Designed **Power BI** dashboards showcasing key reliability metrics, resulting in a **40% swifter** data stability assessment. Instrumental in driving the company's strategy, introducing the reliability metrics dashboard that influenced the establishment of SLA targets. The new strategic direction is set to cut cloud execution durations **by 30%**.
- **Data Model Design & Integration:** Partnered with senior data engineers to architect a common data model, anticipating a **50% simplification** in reporting and strengthening system efficiency, setting the stage for seamless future product integrations.

**Software Developer, Tata Consultancy Services, India**

*October/2020 - January/ 2022*

- **Web Development & Impact:** Led the development of Vodafone's customer portal using **Java Spring Boot** and **React JS**, achieving a **40% decrease** in customer complaint resolution times.
- **Leadership & Project Management:** Directed a team of 10+ junior **Java developers** to the successful completion of two significant projects on time and within budget. Showcased expertise in **MYSQL** configurations, hands-on code development, and comprehensive testing.

- **Tech Innovations:** Played a pivotal role in transitioning our commerce **API** to a **microservices** architecture, incorporating **Docker**, **Amazon ECS**, and various **AWS** services. Additionally, made significant contributions to a **CRM** project using technologies like **Java 1.6**, **J2EE**, and **Ajax**.
- **Data & Infrastructure:** Managed extensive **MYSQL** databases containing over **100 million** records and consistently delivered crucial daily **SQL** reports. Maintained and troubleshooted **on-premise critical servers**, ensuring high performance, availability, and data security. Directed the upkeep of 20+ client-critical servers, guaranteeing uninterrupted service and efficient client request processing.

## Projects

### **Hack IOWA 2023: Best Sustainability App Award Winner by Engie**

*September/2023 – September/2023*

- Laid the groundwork for the **first-ever comprehensive analysis** of a **10-year's solar energy data** from two distinct arrays at the University of Iowa, delivering **pivotal insights** guiding the company's **long-term performance and sustainability strategies**.
- **Uncovered a stark efficiency discrepancy** between computed and factory-measured rates, **showing 7.418% vs 14.8% for Solar Panel 1 and 0.9% vs up to 9% for Solar Panel 2**. These insights **influenced maintenance cycles and future investment decisions**, leading to a re-evaluation of degradation rates (-0.80 for Solar Panel 1 and -0.45 for Solar Panel 2).
- Evaluated the **financial viability** of Solar Panel 1 and Solar Panel 2 through a dual-scenario **Payback Analysis**, uncovering that originally unfeasible payback periods of 122 and 148 years became feasible at 38 and 41 years under a flat gas generator rate. This **critical insight** significantly **guided the company's decision** on which solar panel technology to invest in for long-term sustainability.

### **End-to-End Digital Solution for UWM's Research Poster Competition Management**

*November/2022 - April/2023*

- Developed a dynamic web application for the Student Research Poster Competition, achieving a **98% reduction** in result compilation, utilizing technologies including **Django**, **React**, and **AWS** services for efficient data processing.
- Streamlined the grading process with an intuitive, user-friendly interface, leading to a **90% increase** in efficiency and earning positive feedback from a wide range of industry professionals, achieved by leveraging **JWT authentication** and **Tailwind CSS**.
- Ensured **99.9% uptime** and significantly reduced deployment failure rate by utilizing **Docker** containers, showcasing efficient **distributed systems** management and effective **containerization**.

## Achievements and Professional Development

- **Graduate Teaching Assistant**, University of Wisconsin Milwaukee: Provided instructional support in subjects including Cloud Computing, Operating Systems, and Intermediate Java Programming. **August/2022 - Present**
- **President, Google Developer Student Clubs (GDSC)**, University of Wisconsin Milwaukee: Led the university's GDSC, an initiative supported by Google, fostering a community of students interested in Google developer technologies. **July/2022 - June/2023**
- **Chancellor's Graduate Student Award Recipient:** Recognized for academic excellence and contributions to the University of Wisconsin Milwaukee, receiving the award on three occasions, totaling \$10,000. **2022 - 2023**
- **Microsoft Certified** during Kohler Internship: Successfully completed the following certifications while interning at Kohler Co.: **June/2023**
  - **AZ-900:** Microsoft Azure Fundamentals
  - **AI-900:** Microsoft Azure AI Fundamentals
  - **DP-900:** Microsoft Azure Data Fundamentals
- Author of the paper "**Gideon-an artificial intelligent companion**," my first attempt at how we can parse the users' inputs using context-based parsing techniques such as intent classification and entity recognition. <https://bit.ly/GideonPaper>. **August/2019 - January/2020**
- 1st position out of 100 teams in the Swish International hackathon organized by Japanese-based institutions and won a cash prize of \$700.