Project 1: Valyria Technology GmbH

- Customer Name (or Industry): Valyria Technology GmbH / Real Estate Industry
- Role: Lead Data Scientist, Mentor
- **Duration**: 14 months (September 2021 November 2022)
- **Project Name**: Automated Real Estate Valuation Model
- **Team Size**: 3-6 people (agile team)

Responsibilities:

- Built the entire data science team from scratch, ensuring an effective and collaborative working environment.
- Defined vision, strategy, and tech stack, driving the successful delivery of data science projects on schedule.
- Led the development of an automated valuation model for real estate properties, completed ahead of schedule due to domain expertise and efficient team management.
- Mentored **three PhD students** from the Hasso Plattner Institute, guiding their research integration into the company's real estate solutions.

Management Objectives:

- Delivered the real estate project within time and budget, coordinating cross-functional collaboration with external partners and data providers.
- Ensured that each team member's professional development was aligned with project goals, fostering a strong, motivated team.

Technologies Used:

- Python, Jupyter, Pandas, AirFlow, SQL, TensorFlow, XGBoost, Git, Docker, MLFlow, AWS, DataBricks, PySpark
- Agile methodology (Kanban), MLOps, flat hierarchy management

Milestones:

- **Biggest Success**: Delivered a competitive valuation model that was ahead of schedule, earning praise from team members for strong leadership and domain expertise.
- Mentored **three PhD students** and facilitated their successful integration into the research and development process.

Reference:

Leon Lowitzki (Machine Learning Engineer), Contact: https://www.linkedin.com/in/leon-lowitzki (Machine Learning Engineer), Contact: https://www.linkedin.com/in/leon-lowitzki (Beonlowitzki (Beonlowitzki)) (Beonlowitzki)

Thomas Christian Thiele (Fractional CTO), Contact: https://www.linkedin.com/in/tcthiele, tct@ttis.de

Project 2: Homeday GmbH

- Customer Name (or Industry): Homeday GmbH / Real Estate Industry
- Role: Principal Data Scientist & Business Analyst
- **Duration**: 38 months (February 2017 April 2020)
- Project Name: Homeday PREISATLAS Development

Responsibilities:

- Spearheaded the creation and development of machine learning models for property valuation, a key component of the <u>Homeday PREISATLAS</u>.
- Was responsible for all data science development.
- Actively extended responsibilities to include strategic insights for business process optimization and team empowerment.

Management Objectives:

- Delivered <u>data science products</u> that drove a 1500% increase in site traffic and a 750% increase in qualified leads.
- Focused on clear communication, which contributed to a highly effective and collaborative atmosphere.

Technologies Used:

• Python, Jupyter, Pandas, Scikit-Learn, XGBoost, Postgres, Docker, R, AWS

Milestones:

- **Biggest Success**: Built and successfully delivered the property valuation model that became a core part of Homeday's operations, earning extensive recognition for datadriven solutions.
- Extended responsibilities beyond initial role, delivering significant business impact and pushing boundaries of team innovation.

Reference:

Steffen Wicker (Co-Founder & CEO), Contact: https://www.linkedin.com/in/steffenwicker Philipp Reichle (Former Manager), Contact: https://www.linkedin.com/in/philipp-reichle-6b173879

Project 3: Lot Internet GmbH

- Customer Name (or Industry): Lot Internet GmbH / Automotive Industry
- Role: Senior Data Scientist & Consultant
- **Duration**: 9 months (October 2023 July 2024)
- **Project Name**: Vehicle Data Analytics for Skoda GmbH

Responsibilities:

- Led the design and development of a vehicle data analytics system focusing on price calculations and predictive analytics for Skoda GmbH.
- Managed shifting project goals and provided both strategic and hands-on guidance to ensure successful product development.
- Resolved development bottlenecks and demonstrated proactive leadership with innovation.

Management Objectives:

• Delivered results that secured Skoda GmbH as a key client for the company, meeting both the company's and the client's expectations.

Technologies Used:

• Python, Jupyter, Pandas, SQL, CatBoost, Git, Docker, AirFlow, SQL, PyTorch, AWS, LangChain (LLMs), Hugging Face (transformers)

Milestones:

• **Biggest Success**: Successfully delivered a complex pricing analytics solution that opened new business opportunities for Lot Internet GmbH.

Reference:

Ulrich Hirtreiter (CEO), Contact: https://www.linkedin.com/in/ulrich-hirtreiter-44299a1, ulrich.hirtreiter@lot-internet.de

Project 4: Kenjo GmbH (ex: Org OS GmbH)

- Customer Name (or Industry): Kenjo GmbH / HR Tech Industry
- Role: Data Scientist & Consultant
- **Duration**: 26 months (May 2018 June 2020)
- Project Name: Predictive HR Analytics System Development, Grant Application

Responsibilities:

- Led the design and conceptualization of a predictive analytics engine for HR data, providing strategic insights for business-critical HR functions.
- Consulted closely with the CEO to ensure that data science objectives were aligned with business goals and growth strategies.
- Successfully authored and presented a grant proposal, securing €1.2 million in funding for the company's HR digitization project.

Management Objectives:

- Delivered the project within tight deadlines, despite evolving requirements.
- Pushed for innovation by integrating new data methodologies, contributing significantly to the company's strategic vision.

Milestones:

- **Biggest Success**: Secured €1.2 million in funding through a successful grant proposal, directly impacting Kenjo's product development and market expansion.
- Created a base for a predictive analytics engine that supported the company's long-term HR strategies, ensuring scalable growth.

Reference:

David Padilla (Co-Founder & CEO), Contact: https://www.linkedin.com/in/davidpadillazh, david@kenjo.io