Michael Notter

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Meta, Zurich

September 24th, 2024

**Application for Senior Machine Learning Engineer/Research Scientist Position**

Dear Meta Team,

I am writing to express my strong interest in joining Meta's team in Zurich as a Senior Machine Learning Engineer or Research Scientist. With a multidisciplinary background that uniquely blends machine learning, advanced signal processing, and neuroscience, I am eager to contribute to Meta's cutting-edge projects and mission to connect people through technology.

With over 13 years of experience in machine learning and neuroscience, I have dedicated my career to uncovering hidden patterns in complex data. My passion lies in developing sophisticated models and processing pipelines that bridge the gap between innovative research and practical real-world applications.

**My Strengths**

**Advanced Signal Processing & Data Analysis**

* Proficient in handling diverse data modalities: MRI, EEG, MEG, PPG, eye-tracking, audio, and various sensor data.
* Developed automated and robust processing pipelines adaptable to versatile input data.
* Strong focus on data quality assessment, explorative data analysis, signal-to-noise ratio (SNR) improvements, and effective results presentation.

**Machine Learning & Deep Learning Proficiency**

* Experienced in implementing state-of-the-art machine learning pipelines and deep learning models.
* Skilled in exploiting nuanced information in intricate latent spaces using specialized loss functions.
* Fluent in Python, Scikit-Learn, PyTorch, and TensorFlow; familiar with model quantization and optimization.
* Capable of rapidly assimilating current literature and adapting the newest approaches to practical solutions.

**Innovation, Optimization, & Patents**

* Co-authored multiple patents in machine learning and optical solutions.
* Passionate about optimizing models to reduce memory, power, computation costs, and latency for edge and wearable devices.
* Deep interest in wearable devices and human-computer interfaces, working closely with hardware developers for iterative advancements.

**Leadership, Collaboration, & Communication**

* Experienced technical project lead, overseeing work packages, deliverables, and risk management.
* Enjoy working within multidisciplinary teams, demonstrating initiative and autonomy to deliver high-quality results efficiently.
* Skilled in communicating complex topics to diverse audiences, including managers and executives.
* Transparent, reliable, and dedicated to both individual and team goals.

**Rapid Learning & Adaptability**

* Ability to acquire new technical knowledge and skills rapidly, even in entirely novel domains.
* Experienced in exploring, assessing, and exploiting any kind of dataset.
* Skilled in detecting when analytical approaches suffice over ML/DL methods.

**Commitment to Continuous Learning**

While I have a strong foundation in signal processing, computer vision, and deep learning, I am also eager to expand my expertise into large language models (LLMs), generative AI, MLOps, and reinforcement learning. Although my current role hasn't allowed me to explore these areas enough, I am well-informed and enthusiastic about learning and integrating these skills into my future work to further enhance my contributions.

**Why Meta?**

Meta's commitment to advancing AI and developing innovative technologies that bring people closer together resonates deeply with my own career aspirations. I am passionate about leveraging AI to facilitate meaningful connections, empower individuals, and ensure that technological advancements benefit a diverse and global community.

I am inspired by Meta's commitment to pushing the boundaries of AI, human-computer interaction, wearables, and VR/AR. Working alongside other experts in a dynamic and forward-thinking environment is where I see myself thriving. I am particularly interested in positions within the Brain & AI, Computer Vision, Human-Inspired AI, or Mixed and Virtual Reality groups within Meta’s Reality Labs or FAIR teams.

**Closing Thoughts**

I believe that my versatile skill set, passion for innovation, and dedication to excellence make me a strong candidate for roles within Meta. I am excited about the possibility of contributing to your projects and collaborating with other experts to shape the future of technology.

Thank you for considering my qualifications. I look forward to the opportunity to discuss how my background and skills can contribute to Meta's mission and objectives.

Sincerely,

Michael Notter