Introduction to MEDIN Fund Management Company

MEDIN Fund Management Co. is a visionary venture capital firm, founded by a team of seasoned executives with a proven track record that dates back to the early 1990s in the VC and technology sectors across North America, Europe, the GCC, and Asia. We specialize in managing venture capital funds that bridge the North African technology ecosystem with the world's leading tech hubs, including Silicon Valley, Europe, and Asia.

Our core team is bolstered by a vast network of more than 30 C-level venture partners, all of whom hold key positions at top global tech firms across North America, Europe, and the GCC. This network allows us to support ambitious founders with global aspirations, developing cutting-edge solutions and services that have the potential to revolutionize industries and reshape the future.

Titan Seed Fund, a deep tech-focused fund under our management, primarily invests in early-stage ventures. Our investment strategy centers on two key sectors:

- **Lifesciences**: Including biotech, bioinformatics, diagnostics, and more.
- **AI-enabled hardware/software solutions**: Spanning across enterprise, cybersecurity, mobility, semiconductors, IoT, and beyond.

We offer seed-stage investments with ticket sizes averaging EUR 500K, scaling up to EUR 1 million throughout the investment lifecycle. One of the unique advantages we provide to our portfolio companies is the opportunity to establish high-performance R&D

operations in Tunisia, capitalizing on the wealth of research expertise, PhD talent, and AI specialists available in the region.

With a combined experience of investing over EUR 200 million in Silicon Valley, North Africa, and the GCC, our founding team is well-positioned to empower the next generation of innovators and disruptors.

LinkedIn : Link

Note to Students:
All proposed topics can be adapted to suit the student's preferences and areas of interest. We encourage flexibility and creativity in shaping each project. Moreover, students who join us as interns will be given priority for potential full-time opportunities within our firm, portfolio companies and broader network, creating a seamless pathway for career growth in venture capital and deep tech industries.

Topic 1: Portfolio Management and PMO for Deep Tech Startups

Objectives:
This project aims to ensure the efficient follow-up and management of Deep Tech startups within the VC firm's portfolio by establishing a robust Portfolio Management Office (PMO). The PMO will be responsible for tracking startup milestones, managing financial performance, and ensuring alignment between the startups' goals and the VC firm's strategic objectives. The intern will focus on monitoring financial performance, overseeing board meetings, and managing risk across the portfolio.

Missions:

- Monitor the financial performance of portfolio startups, including cash flow, burn rate, and funding requirements.
- Coordinate regular board meetings and startup check-ins, ensuring effective communication between founders and the VC firm.
- Develop reporting tools to track key performance indicators (KPIs), financial metrics, and milestones for each portfolio company.
- Implement risk mitigation strategies, focusing on financial stability and operational challenges.
- Assist in preparing financial reports and updates for the investment team, including recommendations for follow-on investments or divestments.
- Work closely with startup founders to align financial planning with the VC firm's long-term goals.

Technical Competencies:

- Knowledge of financial analysis and startup financial metrics.
- Understanding of project management principles and portfolio oversight.
- Familiarity with KPIs, financial performance tracking, and milestone reporting in the startup ecosystem.
- Strong organizational and communication skills.
- Experience coordinating meetings and managing financial follow-ups.

Level: Bachelor's or Master's in Project Management/Business Administration/Finance
Duration: 6 months
Availability: As Soon as possible

Topic 2: Risk Management Framework for Pre-Investment in Deep Tech

Objectives:
This project aims to develop a detailed and structured risk management framework specifically designed for Deep Tech startups at the pre-investment stage. The focus is to analyze risks associated with technological innovation, market readiness, regulatory compliance, and operational challenges. By the end of this project, the intern will create a comprehensive model to identify, assess, and mitigate risks that could influence the investment committee's decision-making process. This framework will provide a clear methodology for evaluating the viability of investments in Deep Tech sectors like AI, robotics, and quantum computing.

Missions:

- Conduct in-depth research to identify common risks faced by Deep Tech startups in various sectors.
- Develop a risk matrix that categorizes and prioritizes risks by impact and probability.
- Design risk mitigation strategies to address identified risks, including contingency plans and possible interventions.
- Work closely with the investment team to apply the framework in evaluating real startup opportunities.
- Present findings and the finalized framework to the Investment Committee for feedback and refinement.

Technical Competencies:

- Knowledge of risk management techniques and frameworks.
- Familiarity with investment decision-making processes.
- Understanding of the Deep Tech landscape and its unique challenges.
- Analytical skills for assessing technological and operational risks.
- Ability to work with cross-functional teams and present complex ideas clearly.

Level: Bachelor’s or Master’s in Business Administration/Management
Duration: 6 months
Availability: As Soon as possible

Topic 3: Market Research for Cybersecurity Products to Support Investment Decisions

Objectives:
This project focuses on conducting extensive market research to analyze the current landscape of cybersecurity products and services. The research will explore key industry trends, emerging threats, market growth opportunities, and competitive dynamics. The goal is to provide actionable insights that will support the venture capital firm's investment decisions in cybersecurity startups. The project will also cover regulatory implications and technological advancements shaping the cybersecurity market, ensuring a comprehensive understanding of where growth potential lies.

Missions:

- Analyze market trends, identifying emerging technologies in cybersecurity (e.g., AI-based security solutions, zero-trust models, etc.).
- Conduct competitor analysis, evaluating major players in the cybersecurity space.
- Study regulatory frameworks affecting cybersecurity startups in different regions.
- Prepare detailed reports on market forecasts, growth opportunities, and threats.
- Collaborate with the investment team to align research findings with strategic investment goals.

Technical Competencies:

- Strong understanding of market research methodologies.
- Familiarity with the cybersecurity sector and its challenges.
- Analytical and forecasting skills for market data.
- Ability to interpret regulatory impacts on business models.
- Report writing and presentation skills.

Level: Bachelor's or Master's in Business Administration/Management/MIS
Duration: 4-6 months
Availability: As Soon as possible

Topic 4: Automation of Pre-Investment Screening for Deep Tech Startups

Objectives:
The goal of this project is to develop a machine learning-based solution that automates the screening process of Deep Tech startups during the pre-investment phase. The system will streamline the evaluation of startups by analyzing various factors such as technological innovation, market fit, and scalability potential. By the end of the project, the intern will deliver a functioning automation tool that enhances the efficiency and accuracy of the VC firm's startup evaluations, reducing manual workload and improving decision-making speed.

Missions:

- Research machine learning models suitable for screening startups based on key investment criteria.
- Design and implement a system that evaluates startup proposals and ranks them according to potential success.
- Develop an algorithm that assesses technological readiness, team competency, and market potential.
- Work with the investment team to gather historical data and train the model for accurate predictions.
- Test the automation tool on real case studies and refine the system based on results.

Technical Competencies:

- Strong understanding of machine learning algorithms and their applications.
- Knowledge of Deep Tech sectors and their specific evaluation criteria.
- Data analysis skills, especially in pre-investment stages.
- Programming skills in Python, R, or similar languages.
- Experience in automation and optimization of processes.

Level: Bachelor's or Master's in MIS
Duration: 5-6 months
Availability: As Soon as possible

Topic 5: AI-Driven Due Diligence Platform for VC Firms

Objectives:
This project aims to develop an AI-driven platform to automate the due diligence process for VC firms, particularly those investing in Deep Tech startups. The platform will leverage artificial intelligence to analyze and process financial, operational, and legal data. The result will be a more efficient, thorough, and consistent due diligence process that saves time while providing deeper insights into potential investments. By the end of the project, the intern will deliver a functional platform prototype tailored to the needs of venture capital firms.

Missions:

- Research the current due diligence processes and identify areas where automation could add value.
- Design an AI system that integrates data from multiple sources (financial reports, legal documents, etc.) to automate the assessment.
- Develop algorithms to evaluate key indicators such as financial health, legal compliance, and operational efficiency.
- Collaborate with the investment and legal teams to refine the platform according to real-world requirements.
- Test the platform on live cases and present a refined prototype.

Technical Competencies:

- Expertise in AI technologies and applications in finance.
- Understanding of due diligence processes, especially in Deep Tech investments.
- Knowledge of financial and legal data analysis.
- Experience with data integration and automation.
- Programming skills in AI-related tools and platforms.

Level: Bachelor's or Master's in MIS
Duration: 6 months
Availability: As Soon as possible

Topic 6: Financial Risk Assessment Tools for Deep Tech VC Investments

Objectives:
This project aims to develop tools that enable venture capital firms to assess the financial risks associated with investing in Deep Tech startups. The objective is to create a framework that evaluates risks such as liquidity constraints, market volatility, and the financial sustainability of startups. By the end of the project, the intern will have designed a set of tools to help VC firms manage financial risk exposure during the pre-investment stage, enhancing decision-making and portfolio management.

Missions:

- Research financial risk factors that are specific to Deep Tech investments.
- Develop a tool that assesses liquidity, financial sustainability, and market volatility risks.
- Create models to predict future financial performance and identify potential pitfalls.
- Test the financial risk tools on real or simulated investment scenarios.
- Present findings and recommendations for improving financial risk management practices.

Technical Competencies:

- Knowledge of financial risk assessment methodologies.
- Understanding of liquidity, volatility, and market dynamics.
- Proficiency in financial modeling and forecasting.
- Experience with data analysis and risk evaluation.
- Strong analytical skills and attention to detail.

Level: Bachelor's or Master's in Finance
Duration: 6 months
Availability: As Soon as possible

Topic 7: Impact of Capital Structure on Deep Tech Startups' Growth Potential

Objectives:
This project seeks to explore how different capital structures, including equity and debt financing, influence the growth potential of Deep Tech startups. The intern will develop models to assess how various financing approaches affect scalability, innovation, and long-term financial stability. By the end of the project, a framework will be presented that helps VC firms understand how to structure capital in ways that maximize a startup's growth potential.

Missions:

- Study different capital structures and their impact on startup scalability and innovation.
- Develop a model to evaluate the trade-offs between equity and debt financing.
- Analyze real-world case studies of Deep Tech startups and their financing strategies.
- Collaborate with financial advisors to validate the capital structure models.
- Present recommendations on optimal capital structures for VC-backed startups.

Technical Competencies:

- Strong understanding of corporate finance and capital structures.
- Knowledge of equity and debt financing.
- Financial modeling and analysis skills.
- Ability to evaluate startup scalability and growth potential.
- Experience in evaluating long-term financial sustainability.

Level: Bachelor's or Master's in Finance
Duration: 6 months
Availability: As Soon as possible

Topic 8: Valuation Models for Early-Stage Deep Tech Startups

Objectives:
This project focuses on creating a valuation model specifically designed for early-stage Deep Tech startups, taking into account their unique characteristics, such as high R&D costs and extended timelines for commercialization. The objective is to provide venture capital firms with accurate valuation estimates that reflect the challenges and opportunities within Deep Tech. The intern will develop a model that can be used during early-stage investment discussions.

Missions:

- Study existing valuation methods and identify gaps when applied to Deep Tech startups.
- Develop a valuation model that incorporates R&D costs, market potential, and technological readiness.
- Test the model on real or simulated Deep Tech startup data.
- Collaborate with the finance and investment teams to refine the model.
- Present the final valuation model and recommendations to the Investment Committee.

Technical Competencies:

- Knowledge of valuation models and financial analysis.
- Understanding of Deep Tech industries and their specific financial characteristics.
- Strong skills in financial modeling and data analysis.
- Proficiency in Excel, Python, or financial modeling software.
- Analytical skills to evaluate startup potential.

Level: Bachelor’s or Master’s in Finance
Duration: 6 months
Availability: As Soon as possible

Topic 9: Valuation of an Existing Portfolio of Startups Based on Market Forecasts

Objectives:
This project aims to develop a valuation model for an existing portfolio of startups by leveraging market forecasts and growth projections. The intern will assess market potential, industry trends, and competitive landscapes to create a dynamic valuation framework that will assist VC firms in determining the future value of their portfolio companies for follow-on investments or exit strategies.

Missions:

- Analyze current market trends and growth projections in various sectors.
- Develop a dynamic valuation model that incorporates market forecasts and competitive factors.
- Evaluate the existing startup portfolio using the model and identify growth opportunities.
- Work with the finance team to refine valuation assumptions and methodologies.
- Present the final valuation framework and findings to stakeholders.

Technical Competencies:

- Expertise in financial modeling and valuation techniques.
- Ability to analyze market trends and industry forecasts.
- Strong understanding of portfolio management.
- Proficiency in data analysis and financial forecasting tools.
- Experience in applying market dynamics to valuation models.

Level: Bachelor's or Master's in Business Administration/Finance
Duration: 6 months
Availability: As Soon as possible

Topic 10: Convertible Notes and Their Impact on Deep Tech Startup Financing

Objectives:
This project focuses on studying the use of convertible notes as a financing mechanism for Deep Tech startups. The intern will explore how convertible notes impact financial structure, ownership dilution, and growth potential. By the end of the project, the intern will provide insights into the advantages and disadvantages of using convertible notes in the financing of early-stage Deep Tech startups.

Missions:

- Study the structure and use of convertible notes in startup financing.
- Analyze the impact of convertible notes on financial structure and ownership dilution.
- Evaluate real-world cases where convertible notes were used to finance Deep Tech startups.
- Collaborate with financial and legal teams to understand the legal implications of convertible notes.
- Present findings and recommendations on when and how to use convertible notes.

Technical Competencies:

- Understanding of startup financing mechanisms, especially convertible notes.
- Knowledge of legal and financial implications of convertible notes.
- Financial modeling and analysis skills.
- Familiarity with equity and ownership structures.
- Analytical skills to assess impact on growth potential.

Level: Bachelor's or Master's in Finance/Law
Duration: 6 months
Availability: As Soon as possible

Topic 11: Developing a Framework for Cross-Border Investment Opportunities in the Deep Tech Sector

Objectives:
This project aims to build a comprehensive framework for identifying and pursuing cross-border investment opportunities in the Deep Tech sector. The intern will analyze global market dynamics, regulatory considerations, and competitive landscapes to develop a blueprint for international VC investment strategy. The goal is to equip the VC firm with a robust framework for making informed decisions about entering new markets and investing in startups across borders.

Missions:

- Analyze global Deep Tech markets, identifying key regions with growth potential.
- Research regulatory environments and competitive landscapes in different regions.
- Develop a cross-border investment strategy, incorporating risk and opportunity assessments.
- Collaborate with international teams to gather insights on market entry strategies.
- Present a final framework to the investment team, complete with recommendations for action.

Technical Competencies:

- Strong understanding of global market dynamics and cross-border investments.
- Knowledge of regulatory and competitive factors in various regions.
- Ability to assess risks and opportunities in international markets.
- Analytical skills in market research and strategic planning.
- Excellent presentation and report writing skills.

Level: Bachelor's or Master's in Business Administration/Management
Duration: 6 months
Availability: As Soon as possible

Topic 12: Global Fundraising Strategies for Deep Tech Startups

Objectives:
This project seeks to analyze and develop effective fundraising strategies for Deep Tech startups across various international markets. The intern will explore fundraising practices in key regions such as Silicon Valley, Europe, and Asia, while considering cultural, legal, and financial influences on fundraising success. The outcome will be a set of strategies designed to optimize fundraising efforts for Deep Tech startups, ensuring adaptability to diverse international environments.

Missions:

- Research fundraising environments in major Deep Tech hubs like Silicon Valley, Europe, and Asia.
- Analyze the cultural, legal, and financial factors that influence successful fundraising in these regions.
- Develop fundraising strategies tailored to specific markets and investor types.
- Collaborate with the finance and legal teams to ensure strategies are compliant with regional regulations.
- Present findings and propose a fundraising strategy roadmap for Deep Tech startups.

Technical Competencies:

- Strong understanding of global fundraising practices.
- Knowledge of legal and regulatory environments for fundraising.
- Ability to analyze financial landscapes in different regions.
- Experience in creating fundraising strategies and business plans.
- Strong communication and presentation skills.

Level: Bachelor's or Master's in Business Administration/Finance
Duration: 6 months
Availability: As Soon as possible

Topic 13: Program to Attract Top Talent for Deeptech Startups

Objectives:
Develop a sustainable strategy to attract and engage talent for Deeptech startups in AI, biotech, semiconductors, and robotics. Build a strong talent pipeline through connections with universities, research centers, and technical institutions, and create a branding strategy that highlights Deeptech's unique opportunities. Organize events and workshops—like hackathons and competitions—to showcase the innovative environment. Launch an ambassador program to reach students and young professionals, providing insights into Deeptech careers.

Missions:

- Design and execute a recruitment strategy targeting students and young professionals passionate about emerging tech.
- Develop outreach campaigns to promote the benefits of working in Deeptech, focusing on innovation and growth.
- Coordinate with startup HR teams to align on hiring needs.
- Organize recruitment events (info sessions, fairs, on-site visits).
- Establish partnerships with educational institutions to build visibility.
- Track program metrics, including application rates, conversion to hires, and feedback.

Technical Competencies:

- **Project management**: Skilled in planning and executing multi-stakeholder programs.
- **Marketing & communication**: Experienced in outreach campaign development.
- **Event management**: Proficient in organizing talent engagement events.
- **Relationship-building**: Strong ability to partner with educational and industry institutions.
- **Data analysis**: Competent in tracking recruitment metrics and assessing program outcomes.
- **Startup ecosystem knowledge**: Familiar with Deeptech startup dynamics.

Level: Bachelor's or Master's in Business Administration, Marketing, Management, or related fields.
Duration: 6 months.
Availability: As soon as possible.