Research:

IE

Programme

Tell me about yourself- why are you interested in this programme?

Financing plan

Ask questions about IE

Thank your interviewer by email

Course

Masters in computer science and business technology

Location: Madrid

* Businesses need to leverage technology or fall behind. Experts who can help businesses develop cutting edge tech with huge impact are in high demand.
* Professors from AWS, Google, Microsoft, IBM, Oracle- so exciting to draw from their expertise. I read IBM insights regularly. Employ the techniques used by these influential tech companies. Links to real world so clearly. Offer insights into the latest most current tech trends.
* I have a tech background which I’ve applied to sciences which I find fascinating but as I transition to a professional career I want to be able to realise its worth in the business world.
* I enjoy the stimulation of rapidly developing role tech plays in business. In my degree I work at the cutting edge of science. E.g. diss on novel solar cell design that hasn’t even been realised.
* I enjoy practical work.
* Theres a misconception that technology will take jobs away when in reality it will act as a consultant e.g. in decision making or free time up for higher value tasks. Adds value to business, allows companies to get a greater return on investment with their employees.
* Live projects- put what you learn into practice. Ive learn with coding this is so effective. Nobody really sits and learns to code. I was given complex problems and had to just figure it out. Chat GPT for coding. Give chat gpt very simple version of what im writing. Fill in the specifics into the skeleton
* Earn certifications from oracle, IBM, Google cloud to boost skill set.

Train students in AI, cloud, HTML, Python and more.

AI:

Machine learning:

Agile:

Style of project management

Smaller chunks of tasks delivered in smaller time frames continuously

Allows adaptation to changing circumstances, priorities, issues that arise. Cut down cost, time, inefficiency.

Emphasis on interaction between individuals, collaboration across the team, collaboration with the customer, effective software, response to change and adapting the plan.

Agile is good for industries which deal with constant and unpredictable change.

Scrum:

One of several different methods used to implement agile

I want to go into:

Technology for sustainability

Aurora

Digital twins

Why IE:

Forward thinking

Cultural thing:

* French, Belgian, Spanish, Mandarin, culture society, travels.
* Multicultural school

Structure:

* Speed-start period. Solid footing to do programme: programming, data structures, digital math and business.
* Foundation. Develop knowledge of AI, IoT, Cloud, BLOCKCHAIN. Agile, scrum. Apply to help company
* Mastery. Finer details of AI, tech dev, data structures, recommendation engines, NLP, bots, cloud, and scalability.

About the Uni:

-top partnerships

-technology and innovation

-sustainability

-cultural diversity

Madrid location- innovation tower- 7000 square metres of green space

* Inspirational place to live.
* Innovation, culture, activities, social, lots of students. Have been a few times and always envisioned myself living there.

Questions:

* What certifications can I get from these partnerships
* How is extended reality used- immersive learning technology

Complete misconception that AI will take jobs:

* AI will improve overall work experience- automate menial tasks to free up time for higher value tasks. Improve job satisfaction as well as employer’s return on investment.
* AI systems must collaborate with employees. People trust people not AI. AI can assist in decision making and offer creative suggestions and data backing but this will all be vetted by a person. COLLABORATION. The nature of jobs will change positively.

Technologies

AI

* Automation and efficiency. E.g. in the manufacturing sector: predictive maintenance to reduce downtime and costs. Siemens uses AI to predict equipment failure, ensure production can be continuous and efficiency is maintained.
* Decision making: analyse big data- strategic decision making.
* Personalise consumer experience. Amazon recommendation engine: uses AI to suggest products based on prior browsing and purchasing history.
* Supple chain optimisation: IBM AI-powered solutions help companies predict demand, manage inventory, optimize supply chain. Reduce cost, improve customer experience.
* Healthcare: Google Health’s AI model for breast cancer screening. Outperforms traditional methods. Saves time etc.
* AI driven energy management systems to optimize energy use- savings, environmental conservation.
* Cybersecurity. AI can detect potential malware threats. Machine learning algorithms can be trained to recognize patterns and charactersitics of known malware. Automated incident response. E.g. shut down connections, disable used accounts. AI can perform vulnerability assessments in systems and networks- preventative

Cloud

HTML

Python

Machine learning

* Branch of AI
* Uses data and algorithms to enable AI to imitate the way humans learn, gradually improving its accuracy.
* Three stages. Deicison- ML makes an estimate about a pattern in input data. Error function- error function evaluates prediction and assesses accuracy. Error function makes a comparison with known example to assess accuracy of model. Model optimization: weights adjusted to reduce discrepancy between known example and model estimate. Iterative evaluate and optimise process until threshold of accuracy has been met.

Data structures

Digital math

IoT

* Network of physical devices, vehicles, appliances, other physical objects embedded with sensors, software, network connectivity, allowing them to collect and share data. Smart objects
* IoT enables these smart objects to communicate with each other, exchange data.
* E.g. can manage traffic patterns with smart cars, track inventory in warehouses, control machines and processes.
* IoT devices can monitor a wide range of parameters e.g. humidity, air quality, energy consumption, machine performance. Analyse data in real time to identify patterns, trends, anomalies. Optimize operations.

Blockchain

* Shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network. Assets can be tangible (house, cash etc.) or intangible (intellectual property, copyrights etc.)
* Immutable ledger only permissioned network members can access. Track orders, payments, accounts, production etc. details of transaction end to end.
* Shared legder- transactions only recorded once which reduces duplication of effrt
* No participant can change or tamper a transaction after its been recorded
* Smart contracts: set of rules stored on blockchain and run automatically. Defines conditions for corporate bond transfers etc.
* Consensus on data accuracy required from all network members

Stuff that had to change

* Operations waste effort on duplicate record keeping and third party validations,
* Record keeping systems vulnerable to fraud and cyberattacks
* Limited transparency slows data verification

NLP

* Computers cann recognize, understand and generate text and speech.
* Translation, respond to commands, summarise large volumes of text etc.
* Customer service chat bots
* Extract insights from unstructured text data. Document summarisation etc.
* Document centric processes (extract key points, answer questions about document contents, generate documents from templates).