

# Business Analytics

# BA topics and supervisor specialization areas

- Note that every supervisor supervises a wide range of topics, also other than mentioned in the slides
- We also assist you to find a suitable topic

# Available master thesis topics for BA

## **Pekka Malo**

- machine learning
- predictive analytics and forecasting
- data mining, text mining
- computational statistics
- applied optimization



# Available master thesis topics for BA

## Juuso Liesiö

- Decision analysis
- Multi-criteria / multi-objective decision making
- Optimization and Mixed-integer linear programming
- Risk analysis
- Scenario methods
- Stochastic dominance
- Behavioral decision theory
- Application areas: portfolio selection and management (R&D projects, products, financial assets), environmental decision making, supply chain management



# Available master thesis topics for BA

**Eeva Vilkkumaa (on leave until April 2023)**

- Decision analysis
- Resource allocation
- Scenario planning
- Strategy development
- Healthcare decision-making



# Available master thesis topics for BA

## Ilkka Leppänen

- Behavioural decision making
- Decision theory and game theory
- Multi-criteria decision making and value focused thinking
- Computational modelling of decision making
- Application areas: retail operations, logistics, platforms, marketing



# Available master thesis topics for BA

## Merja Halme

- Advanced surveys (multi-item measures/constructs)  
typical areas: sustainability views of different services
- Preference measurement
- Marketing applications, especially pricing
- Values, attitudes, sustainable development
- Also qualitative work



# Available master thesis topics for BA

## **Tomi Seppälä**

- Statistics and Data Analytics
- Simulation and Probability, Risk analysis
- Finance and Accounting (e.g. investments) applications
- Transportation, Marketing, International business applications
- Quality Management, esp. Statistical Quality Control
- Biometrics and Medicine applications
- Sports and Games applications
- Education studies





# Available master thesis topics for BA

## Markku Kallio (emeritus)

- Finance, Asset valuation, Portfolio optimization, Mitigation of financial crises, Stochastic dominance, Investment risk management, Real options (real investment valuation), Asset-liability management
- Optimization theory and applications, Multi criteria optimization,
- Performance evaluation (DEA and extensions)
- Equilibrium theory and applications

# Available master thesis topics for BA

## Jyrki Wallenius (emeritus)

- Behavioral decision theory
- Decision support and negotiation analytics
- Online auctions
- Crowdsourcing



# Available master thesis topics for BA

- **Panu Erästö**
- Statistical/bayesian modeling
- General statistics and Data Analytics
- Transmission models
- Epidemiology and health economics
- Computational statistics
- Visualization
- Pedagogical research

