#### Ines Kutleša

Badalićeva 25, 10000 Zagreb, Croatia +385 95 522 7399| ines.kutlesa@gmail.com

#### **FORMAL EDUCATION**

#### 2018 -

#### Faculty of Science - Department of Mathematics, University of Zagreb

Postgraduate study - Actuarial Mathematics

#### 1996 - 2003

#### Faculty of Science - Department of Mathematics, University of Zagreb

Mathematics and Computer Science – Engineer

Master's Thesis Topic - Department of Mathematics (CROSBI project 0037122): "IEEE arithmetic and Stability of numerical algorithms" (issues are represented by programs written in language C and graphically analyzed in Gnuplot).

#### **Knowledge and skills**

- Sound banking knowledge with emphasise on retail credit risk management, payment systems and IT
- Insurance knowledge with emphasise on non-life retail portfolio risk management
- Experience working with large data sets (performed data extraction and manipulation over large relational data sets using advanced SQL techniques and shell scripting)
- Experience with advanced analytics modeling (Python, R, SAS)
- Certified MS Excel proficiency, MS Access proficiency
- Data quality issues identification and resolution
- Data quality and data security assessment with regard to CIA triad (confidentiality, integrity, availability) using strong analytical skills
- IT Project management, IT change management, IT documentation management, Software testing management, IT incident management (working experience with Jira Service Desk software)
- Strong communication and interpersonal skills
- Languages: English (advanced), German (intermediate), Italian (intermediate)

#### PROFESSIONAL EXPERIENCE

# Croatia osiguranje d.d. (Croatian Insurance Company Plc.), Zagreb Digital development department

Software Engineer / (Actuarial) Data Scientist, January 2020. – July 2020.

- Advanced analytics and modeling activities
  - Participate in non-life insurance portfolio and profitability optimization stream implementation (R programming code review - data preparation and data aggregation, EDA, XGboost algorithm, Genetic algorithm (DEoptim), Model owner (responsibility for

- model maintenance), close cooperation with external consultants, pricing actuarial team and data science team
- household data cleaning process (using regular expression)
- Data retrieval from data warehouse using advanced SQL
- Data quality issues identification

### Raiffeisenbank d.d., Zagreb Credit Risk Control Department Risk manager, March 2019 – December 2019

- Validation of statistical models for retail credit risk (retail credit scoring, PD),
- Model monitoring periodical testing of predictivity and stability of retail scorecard models
- Data checks and validation analysis for change on retail portfolio using Oracle PL/SQL developer and SAS software
- Analysis of credit risk data using Oracle PL/SQL developer and SAS software,
- Implementation of SQL data quality checks on DWH for new definition of default.

#### Croatian national bank, Zagreb

# Prudential Regulation Department - Division for Supervision of Advanced Approaches Banking Supervisor - Risk Modeling and IT, January 2018 – March 2019

- Supervision and oversight of Advanced Internal Ratings-based Approach models (A-IRB) in credit institutions focusing on the following tasks:
  - ➤ Data Risk Assessment with emphasis on the data used in credit risk modeling (PD/LGD/EAD estimation, Credit application scorecard process and Minimum capital requirements (RWA) calculation)
  - > Operational risk assessment related to IT infrastructure and information subsystems (DWH/BI system, Core banking system, Credit scoring system) used to storing the data used to calculate credit rating, PD/ LGD/EAD and RWA,
  - > Data Quality management and Data Governance process overview,
  - Data Quality requirements and Data Quality controls overview,
  - Meta-analysis of Credit risk datasets using SQL
  - > SAS code analysis
  - Regulatory compliance assessment

### Croatian national bank, Zagreb

#### **Information System Supervision Division**

#### Banking Supervisor - IT and Payment Services, July 2008 - January 2018

- Supervision and oversight of information systems in credit institutions focusing on the following tasks:
  - ➤ IT Risk assessment of banking information systems on the basis of on-site supervision, IT audit reports analysis and other supervision off-site activities,
  - ➤ IT risk assessment process involve: banking applications analysis settings (Role-based access controls), analysis of databases and operation systems security settings (AIX OS, Linux, Oracle DWH, AS400 DB), cyber security risk assessment, digital banking security, application and system logs analysis, assessment of information system governance

- practice (IT change management, IT project management, IT risk management, internal IT audit, Business continuity and disaster recovery management, IT documentation management, IT asset management, physical security management),
- > Participation in the process of licensing new payment services of financial institutions and electronic money institutions
- Regulatory compliance assessment

# Digitalni mobilnik d.o.o. - Fintech Startup, Zagreb External Associate, Jan 2010 - Sep 2014

- Perform part of activities related to Facepay mobile payment system development (Fintech startup project):
  - > Business model definition;
  - Application design definition;
  - Wallet (mobile) application testing, Central host application testing, Back office application testing, Database modeling (Postgresql database);
  - Store procedure analysis (Postgresql);
  - Data protection issues and information security issues

# Hypo Alpe Adria bank d.d., Zagreb Card processing center

#### System and Data analyst, August 2005 - July 2008

- Hypo Alpe Adria group Card System Maintenance activities Authorization and Back-office Card System and EFT POS/ATM network:
  - Data quality issues resolution, statistical reporting and automatization of business report production using advanced analytical skills (SQL, Unix shell scripting, MySQL, MS Access);
  - Software fixes programming (UNIX shell scripting, SQL, language C),
  - Daily operations control, Card system Data Analysis, Active communication with Card software vendor and Core system vendor in order to resolve production problems, Visa & MasterCard operations;
  - Testing and Implementation of new functionalities of Card system and VISA/MasterCard (security) mandates;
  - Implement rewords programs for customer segmentation;
  - End of day processing emergency intervention and active communication with Card software vendor and Core system vendor in order to resolve production problems;
- IT Project management and Project coordination:
  - Projects of Issuing new debit and credit card products;
  - MasterCard EMV issuing certification project;
  - Hypo Serbia ATM DINA acquiring certification;
  - > Card system migration to a new MasterCard clearing message format All project coordination include:

execution of all mandatory certification test cases, daily communication with payment service providers and vendors in order to identify and resolve card software bugs, implementation of all necessary production changes.

### Privredna banka Zagreb d.d., Zagreb Special project management department IT Projectant, September 2003 – August 2005

- Card System Maintenance activities (Tandem NonStop SQL database, ACI Worldwide CMS)
  Maintenance activities focusing on the following tasks:
  - ➤ Data quality issues resolution, statistical reporting and automatization of business report production using advanced analytical skills (SQL, TACL scripting, Oracle DWH, MS Access),
  - ➤ Coordinate and implement rewords programs for customer segmentation (extract relevant transaction data from ACI CMS database and according to defined conditions analyze transaction data in order to prepare necessary data to create card giveaway coupons),
  - > Daily operations of card business (card production, transaction files sharing with Visa and MasterCard, Back-office processing checks)
  - End of day processing emergency intervention,
  - > Testing and implementation of emergency system changes,
  - Active communication with Card software vendor and Payment service vendor (MC and Visa) in order to resolve production problems,
  - > Implementation of regulatory changes on credit card module regarding interest rate calculation,
  - > Documentation preparation for IT Change management committee,
- IT Project management and Project coordination:
  - Project of issuing first PBZ MasterCard credit Co-brand affinity card (https://www.pbzcard.hr/hr/izdavanje-kartica/mastercard/mastercard-affinity-kartica-nogometne-reprezentacije/)
  - Project of migration to a new back-office card software version (make migration plans, conduct comprehensive testing, implementation of all necessary migration changes, conduct extensive post-migration controls),
  - > Participate in projects of card business integration.
  - Write and document necessary functional specification for in-house programs which were supposed to be changed (including programs related to direct debit data transfer to core banking system).

#### NON – FROMAL EDUCATION (Training courses)

- July 2020, Datacamp Data-Driven Decision Making in SQL (https://www.datacamp.com/statement-of-accomplishment/course/ba359a3da09c452367065316b75365b7582518b9
- May 2020, DataCamp Joining Data with data.table in R (https://www.datacamp.com/statement-of-accomplishment/course/dcbbd5d2fb9352c7fe73843ed156b80769da1512?share=true)
- May 2020, DataCamp Introduction to R

- (https://www.datacamp.com/statement-of-accomplishment/course/c33d9cdd295d62cb02b2)
- ➤ Feb 2020, DataCamp Introduction to Linear Modeling in Python (https://www.datacamp.com/statement-of-accomplishment/course/51af51eb6f45ea626172007985e5f96975ae9559)
- Dec 2019, Coursera Python for Data Science and AI (Credential URL: https://www.coursera.org/account/accomplishments/records/E8CMWL2SCQSC)
- Dec 2019, DataCamp Importing Data in Python (Part 1) (Credential URL: https://www.datacamp.com/statement-of-accomplishment/course/64acbe3237a892935cbc87cf25116553df914b9f)
- Nov 2019, DataCamp Intro to SQL for Data Science (Credential URL: https://www.datacamp.com/statement-of-accomplishment/course/6cb74decb342875ebbece25578dd8d9b843b7366
- Nov 2019, DataCamp Joining Data in SQL (Credential URL: https://www.datacamp.com/statement-of-accomplishment/course/12466f33ae00dc21c767ce1dcd179df81740aeb0)
- ➤ Jul 2019, DataCamp Statistical Thinking in Python (Part 1) (Credential URL: https://www.datacamp.com/statement-of-accomplishment/course/6d923d18a527f601004a2a9cb2782cd9e4990359)
- ➤ Jun 2019, DataCamp Introduction to Data Science in Python (Credential URL: https://www.datacamp.com/statement-of-accomplishment/course/7a7126e275fc6332655565b714f423166500081f)
- ➤ Jun 2019, DataCamp Introduction to Python (Credential URL: https://www.datacamp.com/statement-of-accomplishment/course/2f98e7baaafb8a8250a05e2ac7f6ab2c9c042094?share=true)
- > Sep 2015, Algebra d.o.o., Zagreb Microsoft Excel Advanced Certification
- ➤ Jul 2011, StudioNet Language Center, Zagreb Intensive Italian language course
- Oct 2010, Algebra d.o.o., Zagreb Java Programming Certification
- Feb 2007, Algebra d.o.o., Zagreb Project management techniques
- Sept 2005, Coning d.o.o., Zagreb Unix OS
- > Sep 2004-Jun 2004, AEGIS Language Center, Zagreb English (conversation level 8)
- > Sep 2003-Jun 2003, AEGIS Language Center, Zagreb English (conversation level 7)