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APITECH
Applied Physics, Information
Technologies and Engineering

Science & Technology City Hall
Krasnoyarsk

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«Conference on Applied Physics,
Information Technologies and Engineering»
APITECH-III 2021
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«A formal pattern of information system design»

Unger Anton Yur'evich

Institute of Information Technologies

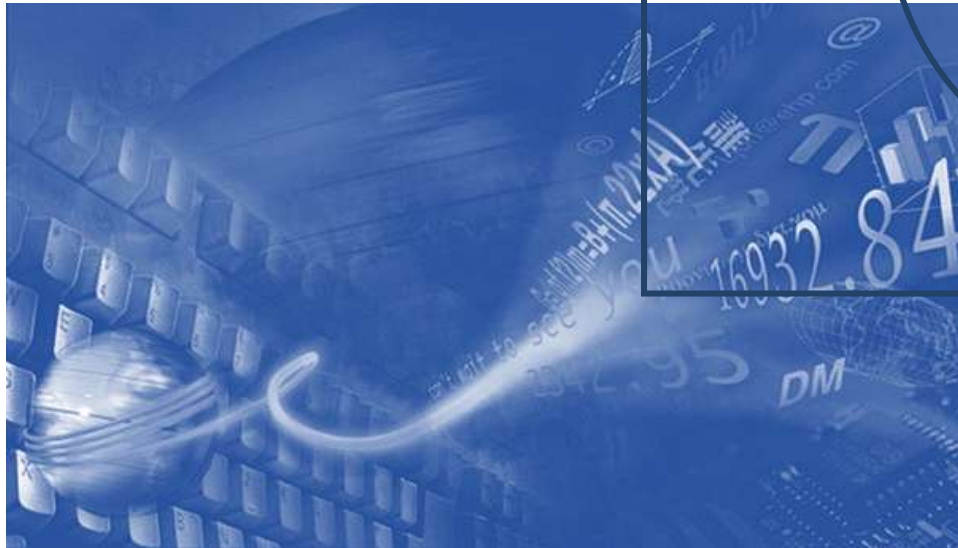
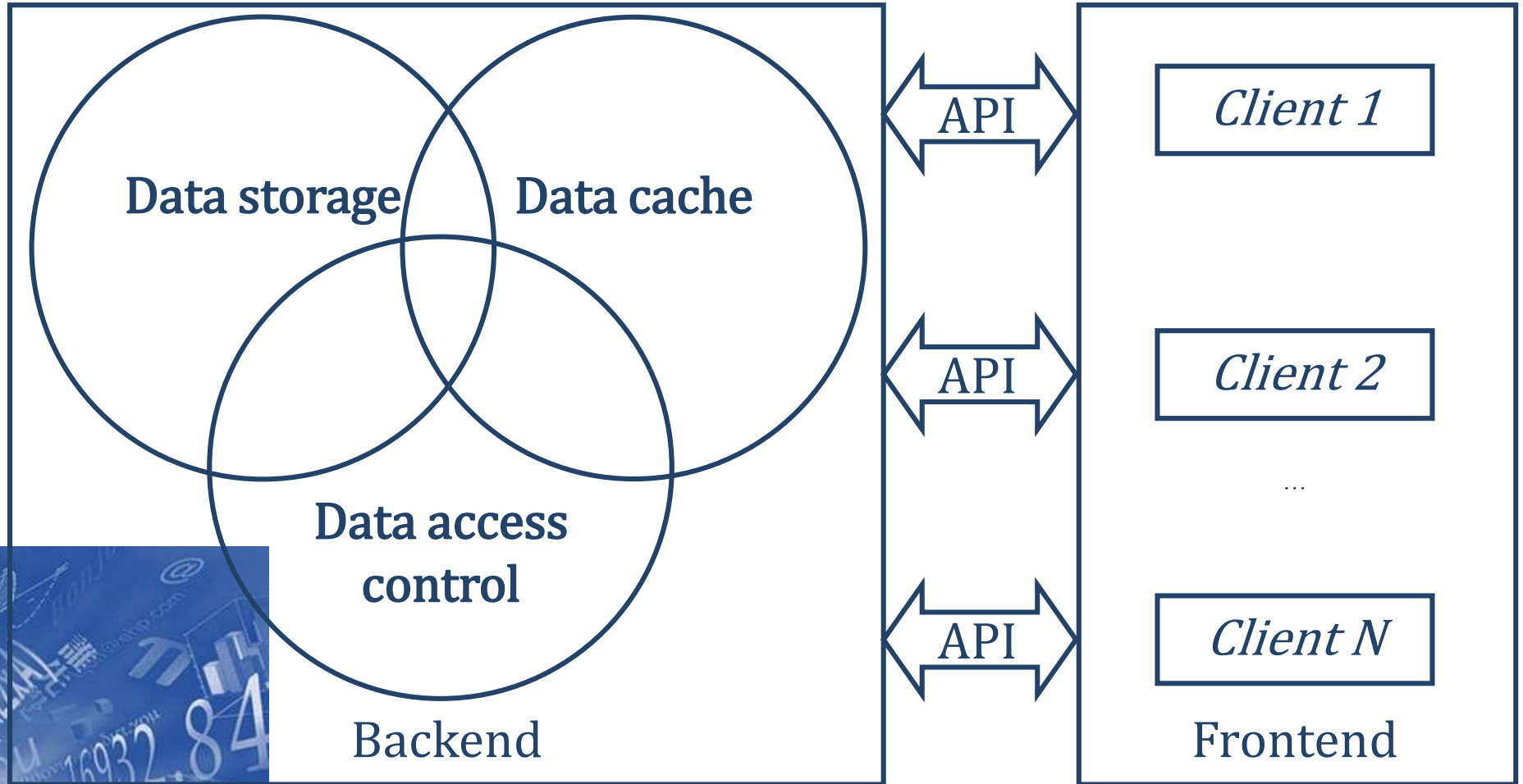
MIREA – Russian Technological University, Moscow

Problem statement

- Problem statement: decomposition of competencies between client and server in modern information system
- Task 1: define a universal unit of storage
- Task 2: select a data exchange format
- Task 3: inject a formal transaction description language



Solution methods



Conclusions

Final implementation is
available on [GitHub](#)

1. Information system schema is divided into 3 main components
2. Rejection of the use of complex queries make it possible to greatly simplify system design
3. Rejection of redundant relations between entities make it possible to greatly simplify cache design
4. Injection of context-sensitive descriptor language make it possible to control data access at transaction level

Contacts

A Y Unger, PhD (technical sciences)

MIREA – Russian Technological University, Moscow

E-mail: unger@mirea.ru

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