

Title

Accidents That Never Happened: Generative AI and Fraud in Motor Insurance

Speaker/Company

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Abstract

Generative AI is already changing how insurance fraud is committed, particularly through fabricated or manipulated images submitted to insurers. This presentation is based on a completed research paper that examined this shift in depth.

The research covers two critical exposure points:

- Underwriting/inception: AI-generated or altered photos submitted when a policy is taken out, distorting risk assessment before coverage begins.
- Claims: synthetic or manipulated images used to justify, exaggerate, or fabricate losses.

To measure human detection capability, we will comment of the results of a global online image-assessment quiz with over 1,000 participants. Results show consistently poor accuracy across all image types and generation methods, demonstrating that manual review is unreliable as a control.

The paper also evaluates existing AI image detection tools and their limitations, including imperfect accuracy, rapid model evolution, and privacy and compliance risks when processing client data.

The key takeaway is that this risk cannot be solved by “picking the best detector.” Insurers need to treat GenAI image fraud as a process problem: how evidence is obtained, verified, handled, and challenged across underwriting and claims, with clear decision rules and escalation paths.

The presentation will show concrete examples of AI-generated and manipulated images relevant to both underwriting and claims, and concludes with future trends that will raise the bar further for image-based verification across product lines.

Biography

Bartosz Gawęda

- Actuary with over ten years of experience in the P&C insurance sector, working across pricing, reserving, and data & analytics
 - Focused on the application of AI and advanced analytics in insurance, with a particular
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interest in using machine learning for motor pricing and fraud detection

- Based in Vienna; outside of work, practices martial arts and climbing

Leonid Zeldin, DAV, CADS

- Working in insurance since 2016 across reinsurance, insurance, and consulting
- Strong focus on data science applied to insurance problems
- Extensive experience in migration projects, portfolio management, controlling, product development, and reporting
- Author of numerous research papers in data science
- Based in Germany; outside of work, plays chess, is a football referee and a football coach