

Automated Feedback Loops: Enhancing Student Motivation and Performance in Programming Courses

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1 INTRODUCTION

2 RELATED WORK

[1]

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3 APPROACH: AUTOMATED FEEDBACK DELIVERY

4 REFERENCE IMPLEMENTATION: ATHENA

4.1 Prompts

4.2 Feedback Generation

4.3 Architecture

5 EVALUATION

5.1 Study Design

5.2 Results

5.3 Limitations

5.4 Discussion

6 CONCLUSION

REFERENCES

- [1] Marcelo Guerra Hahn, Silvia Margarita Baldiris Navarro, Luis De La Fuente Valentin, and Daniel Burgos. 2021. A Systematic Review of the Effects of Automatic Scoring and Automatic Feedback in Educational Settings. *IEEE Access* 9 (2021), 108190–108198. <https://doi.org/10.1109/ACCESS.2021.3100890>