

## 2.D.1 Statement by Each Submitter

*I, Edoardo Persichetti, of Sapienza University, Rome, Italy, do hereby declare that the cryptosystem that I have submitted, known as MEDS, is my own original work, or if submitted jointly with others, is the original work of the joint submitters.*

*I further declare that (check one):*

- I do not hold and do not intend to hold any patent or patent application with a claim or that could be amended to include a claim that may cover the cryptosystem known as MEDS; OR (check one or both of the following):*
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS, may be covered by the following U.S. and/or foreign patents: \_\_\_\_\_ (describe and enumerate or state “none” if applicable)\_\_\_\_\_ ;*
- to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: \_\_\_\_\_ (describe and enumerate or state “none” if applicable) \_\_\_\_\_.*


*I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystem’s specifications (e.g., to protect against a newly discovered vulnerability).*

*I acknowledge that NIST will announce any selected cryptosystem(s) and proceed to publish the draft standards for public comment.*

*I do hereby agree to provide the statements required by Sections 2.D.2 and 2.D.3, below, for any patent or patent application identified to cover the practice of my cryptosystem, reference implementation or optimized implementations and the right to use such implementations for the purposes of the public review and evaluation process.*

*I acknowledge that, during the post-quantum algorithm evaluation process, NIST may remove my cryptosystem from consideration for standardization. If my cryptosystem (or the derived cryptosystem) is removed from consideration*

*for standardization or withdrawn from consideration by all submitter(s) and owner(s), I understand that rights granted and assurances made under Sections 2.D.1, 2.D.2 and 2.D.3, including use rights of the reference and optimized implementations, may be withdrawn by the submitter(s) and owner(s), as appropriate.*

Signed:   
Title: Asst. Prof.  
Date: 28/05/2023  
Place: Rome, Italy

## MEDS SUBMISSION STATEMENT

I, *Krijn Reijnders*, of *Mercator 1, Toernooiveld 212, 6525EC, Nijmegen* do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as Matrix Equivalence Digital Signature (MEDS), is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that:

- I do not hold and do not intend to hold any patent or patent application with a claim or that could be amended to include a claim that may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS, may be covered by the following U.S. and/or foreign patents: none;
- to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystem's specifications (e.g., to protect against a newly discovered vulnerability).

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Signed: 

*Title: Krijn Reijnders*

*Date: April 14, 2023*

*Place: Nijmegen*

## MEDS SUBMISSION STATEMENT

I, *Lars Ran*, of *Mercator 1, Toernooiveld 212, 6525EC, Nijmegen* do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as Matrix Equivalence Digital Signature (MEDS), is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that:

- I do not hold and do not intend to hold any patent or patent application with a claim or that could be amended to include a claim that may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS, may be covered by the following U.S. and/or foreign patents: none;
- to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystem's specifications (e.g., to protect against a newly discovered vulnerability).

I acknowledge that NIST will announce any selected cryptosystem(s) and proceed to publish the draft standards for public comment.

I do hereby agree to provide the statements required by Sections 2.D.2 and 2.D.3, below, for any patent or patent application identified to cover the practice of my cryptosystem, reference implementation or optimized implementations and the right to use such implementations for the purposes of the public review and evaluation process.

I acknowledge that, during the post-quantum algorithm evaluation process, NIST may remove my cryptosystem from consideration for standardization. If my cryptosystem (or the derived cryptosystem) is removed from consideration for standardization or withdrawn from consideration by all submitter(s) and owner(s), I understand that rights granted and assurances made under Sections 2.D.1, 2.D.2 and 2.D.3, including use rights of the reference and optimized implementations, may be withdrawn by the submitter(s) and owner(s), as appropriate.

Signed:

A handwritten signature in black ink, appearing to be 'LR', written over a circular scribble.

*Title: Lars Ran*

*Date: May 23, 2023*

*Place: Nijmegen*

## MEDS SUBMISSION STATEMENT

I, *Monika Trimoska, of Mercator 1, Toernooiveld 212, 6525EC, Nijmegen* do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as Matrix Equivalence Digital Signature (MEDS), is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that:

- I do not hold and do not intend to hold any patent or patent application with a claim or that could be amended to include a claim that may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS, may be covered by the following U.S. and/or foreign patents: none;
- to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystem's specifications (e.g., to protect against a newly discovered vulnerability).

I acknowledge that NIST will announce any selected cryptosystem(s) and proceed to publish the draft standards for public comment.

I do hereby agree to provide the statements required by Sections 2.D.2 and 2.D.3, below, for any patent or patent application identified to cover the practice of my cryptosystem, reference implementation or optimized implementations and the right to use such implementations for the purposes of the public review and evaluation process.

I acknowledge that, during the post-quantum algorithm evaluation process, NIST may remove my cryptosystem from consideration for standardization. If my cryptosystem (or the derived cryptosystem) is removed from consideration for standardization or withdrawn from consideration by all submitter(s) and owner(s), I understand that rights granted and assurances made under Sections 2.D.1, 2.D.2 and 2.D.3, including use rights of the reference and optimized implementations, may be withdrawn by the submitter(s) and owner(s), as appropriate.

Signed: 

*Title: Monika Trimoska*

*Date: May 4, 2023*

*Place: Nijmegen*



## MEDS IMPLEMENTATION STATEMENT

I, *Ruben Niederhagen*, 7F, No 62, Sec 2, Academia Rd, Nangang District, Taipei 11564, Taiwan, am the authorized representative of the owner (Academia Sinica, Taipei, Taiwan) of the submitted reference implementation and optimized implementations and hereby grant the U.S. Government and any interested party the right to reproduce, prepare derivative works based upon, distribute copies of, and display such implementations for the purposes of the post-quantum algorithm public review and evaluation process, and implementation if the corresponding cryptosystem is selected for standardization and as a standard, notwithstanding that the implementations may be copyrighted or copyrightable.

Signed:



*Title:* Ruben Niederhagen

*Date:* April 14, 2023

*Place:* Taipei

## MEDS SUBMISSION STATEMENT

I, *Ruben Niederhagen of 7F, No 62, Sec 2, Academia Rd, Nangang District, Taipei 11564, Taiwan*, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as *Matrix Equivalence Digital Signature (MEDS)*, is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that:

- I do not hold and do not intend to hold any patent or patent application with a claim or that could be amended to include a claim that may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as *MEDS*;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as *MEDS*, may be covered by the following U.S. and/or foreign patents: none;
- to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

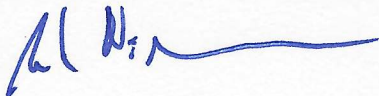
I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystem's specifications (e.g., to protect against a newly discovered vulnerability).

I acknowledge that NIST will announce any selected cryptosystem(s) and proceed to publish the draft standards for public comment.

I do hereby agree to provide the statements required by Sections 2.D.2 and 2.D.3, below, for any patent or patent application identified to cover the practice of my cryptosystem, reference implementation or optimized implementations and the right to use such implementations for the purposes of the public review and evaluation process.

I acknowledge that, during the post-quantum algorithm evaluation process, NIST may remove my cryptosystem from consideration for standardization. If my cryptosystem (or the derived cryptosystem) is removed from consideration for standardization or withdrawn from consideration by all submitter(s) and owner(s), I understand that rights granted and assurances made under Sections 2.D.1, 2.D.2 and 2.D.3, including use rights of the reference and optimized implementations, may be withdrawn by the submitter(s) and owner(s), as appropriate.

Signed:



Title: Ruben Niederhagen

Date: April 14, 2023

Place: Taipei

## MEDS SUBMISSION STATEMENT

I, *Simona Samardjiska*, of Pitrus 75, 6581RP, Malden, The Netherlands, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as Matrix Equivalence Digital Signature (MEDS), is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that:

- I do not hold and do not intend to hold any patent or patent application with a claim or that could be amended to include a claim that may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS, may be covered by the following U.S. and/or foreign patents: none;
- to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystem's specifications (e.g., to protect against a newly discovered vulnerability).

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I do hereby agree to provide the statements required by Sections 2.D.2 and 2.D.3, below, for any patent or patent application identified to cover the practice of my cryptosystem, reference implementation or optimized implementations and the right to use such implementations for the purposes of the public review and evaluation process.

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Signed: 

*Title: Simona Samardjiska*

*Date: 15.05.2023*

*Place: Nijmegen, The Netherlands*

## MEDS SUBMISSION STATEMENT

I, *Tovohery Hajatiana Randrianarisoa*, of Umeå University, 90187 Umeå, Sweden, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as Matrix Equivalence Digital Signature (MEDS), is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that:

- I do not hold and do not intend to hold any patent or patent application with a claim or that could be amended to include a claim that may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS, may be covered by the following U.S. and/or foreign patents: none;
- to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystem's specifications (e.g., to protect against a newly discovered vulnerability).

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Signed: 

*Title: Dr.*

*Date: 14<sup>th</sup> April 2023*

*Place: Umeå, Sweden*

## MEDS SUBMISSION STATEMENT

I, *Tung Chou*, of 128 Academia Road, Section 2, Nankang, Taipei 11529, Taiwan, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as Matrix Equivalence Digital Signature (MEDS), is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that:

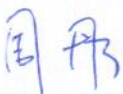
- I do not hold and do not intend to hold any patent or patent application with a claim or that could be amended to include a claim that may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS;
- to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as MEDS, may be covered by the following U.S. and/or foreign patents: none;
- to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

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Signed: 

Title: Dr

Date: April 14, 2023

Place: Taipei, Taiwan