



Californian-Dutch collaboration for AgFoodTech



Adding Washington State to the collaboration

The summer vacation period was in between the last newsletter in July and this one. We used this period to prepare important next steps for the project. One of these steps was adding Washington State to the initiative, Peter Frans de Jong of Wageningen University & Research and Marcel van Haren visited Washington State and California to further specify next steps in the so called collective CAWADU project for fruit orchard automation. The first week of our visit we got to know the Washington State fruit sector very well, thanks to great help of Washington State University (WSU) and the Washington Tree Fruit Research Commission. The picture is taken at the WSU extension in Prosser (WA) where Peter Frans and Marcel had the pleasure to present about Fruit 4.0, FME and AgriFoodTech Platform for a large group of students and other interested people.

They visited the Netherlands in January, and this visit is a return to that visit. We were able to identify a number of collaboration subjects regarding sensing, orchard management and automation. The opportunity of having many different kinds of fruits in the three regions of California, Washington State and the Netherlands brings the advantage of identifying a common approach for automation and quality improvement in the fruit sector. Shaping the trees, sensing and collecting data towards a less labor intense process on the orchard.

Western Growers Association and FME already signed their initial MoU in February, during the World Ag Expo in Tulare (CA), tree fruit automation and robotics is one of the major themes in this. The second week of our trip we

visited California travelling for 3 days with Dennis Donohue to different hotspots in California regarding tree fruits, Mountain Viwe Fruits in Reedley, the UC-ANR Kearney Extension Research Center and UC Riverside. Thanks to the insights from the two weeks we now can take the next steps in our collaboration, a high level Dutch visit in the first week of November is part of this.

[Marcel van Haren](#) (FME & AgriFoodTech Platform)

[Gabe Youtsey](#) (UC ANR & The VINE)

[Dennis Donohue](#) (Western Growers Association)

[Ines Hanrahan](#) (Washington Tree Fruit Research Commission)



Visiting Kearney Station & UC Riverside

Possible great partner fieldlabs for Fruit 4.0 in the Netherlands

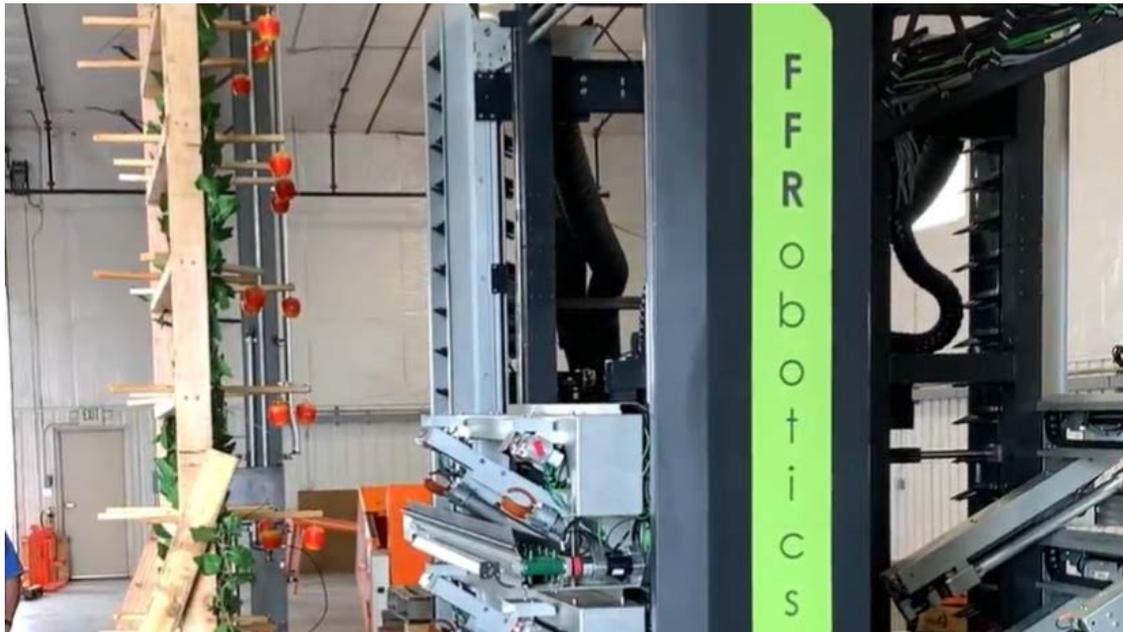
During the visits in the second week at the Kearney Research station of UC-ANR and UC Riverside. In Riverside we were part of a workshop with growers about the practice and challenges of growing different kinds of fruits. There were a lot of similarities regarding the challenges the growers are facing in California compared to Washington and the Netherlands. During earlier visits of one of the growers to the Netherlands we already talked about the option of having UC-ANR Kearney as a partner location for Fruit 4.0 in the Netherlands.



Strawberry Event Storming

An insight giving event at CalPoly, organized together with the Mixing Bowl Hub and Purdue OATS Center

The Thursday of the second week we were part of a workshop to get insight in the data and automation options for the strawberry sector. It was astonishing to see how many event are part of the process to get a strawberry from the grower to the consumer. Aaron Ault of Purdue University was a great leader for this workshop, his next step is to take the results (picture) home to analyse the data and automation options.



Robots, Robots and Robots

An insight giving event at CalPoly, organized together with the Mixing Bowl Hub and Purdue OATS Center

In Washington and California we could see a number of robot initiatives for orchard automation. We had a live demo of the FF Robotics picking robot, great to see how the near future might look like in the orchard. Although there is still a lot of work to be done, the first successful steps are taken. If we can get to a kind of standard orchard shape for different kinds of fruits, it might even become easier. But we have to keep in mind that getting 2D shaped orchards will take a while, therefore collaboration to get at least a standard for this is needed, this is one of the themes of the California, Washington State and Dutch collaboration.

The last day of our visit in California we went to [SRI International](#) in Menlo Park, a place where robots seem to be more common than humans. Amazing what the humans achieved at SRI developing very sophisticated robots for all kinds of applications, including the fruit sector.



Photo by: Spark Architects

Urban Greenhouse Challenge

2nd edition of this cutting-edge International Competition

In the Urban Greenhouse Challenge, multidisciplinary student teams are challenged to bring professional food production (back) into urban neighbourhoods integrating social, economic, environmental and technical aspects in one coherent concept. Their design is based on an existing location in one of the world's major metropolises, this year the Greater Bay Area in China. The teams receive all relevant specifications and get an opportunity to collect their own data during the site visit. The Challenge is open to student teams from all around the world, and teams may comprise students from different universities and universities of applied sciences.

The teams are coached by our worldwide partner network on different themes: horticulture & urban farming / sustainability & circularity / health & lifestyle / architecture & built environment / social behavior and economic impact. Interested in becoming a partner and support the new generation of gamechangers? Check out the [website](#) to see how the Challenge works and how to become part of this great event! Or call Rio Pals (+31 6 4458 4392) / Joost de Bruijn (+31 6 2827 7012) of the Wageningen University & Research organizing team.