Microsoft

Applied Machine Learning
The Dawn of a new Era

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Microsoft Research Cambridge

VOL. LIX. No. 236.] [October, 1950

MIND

A QUARTERLY REVIEW

OF

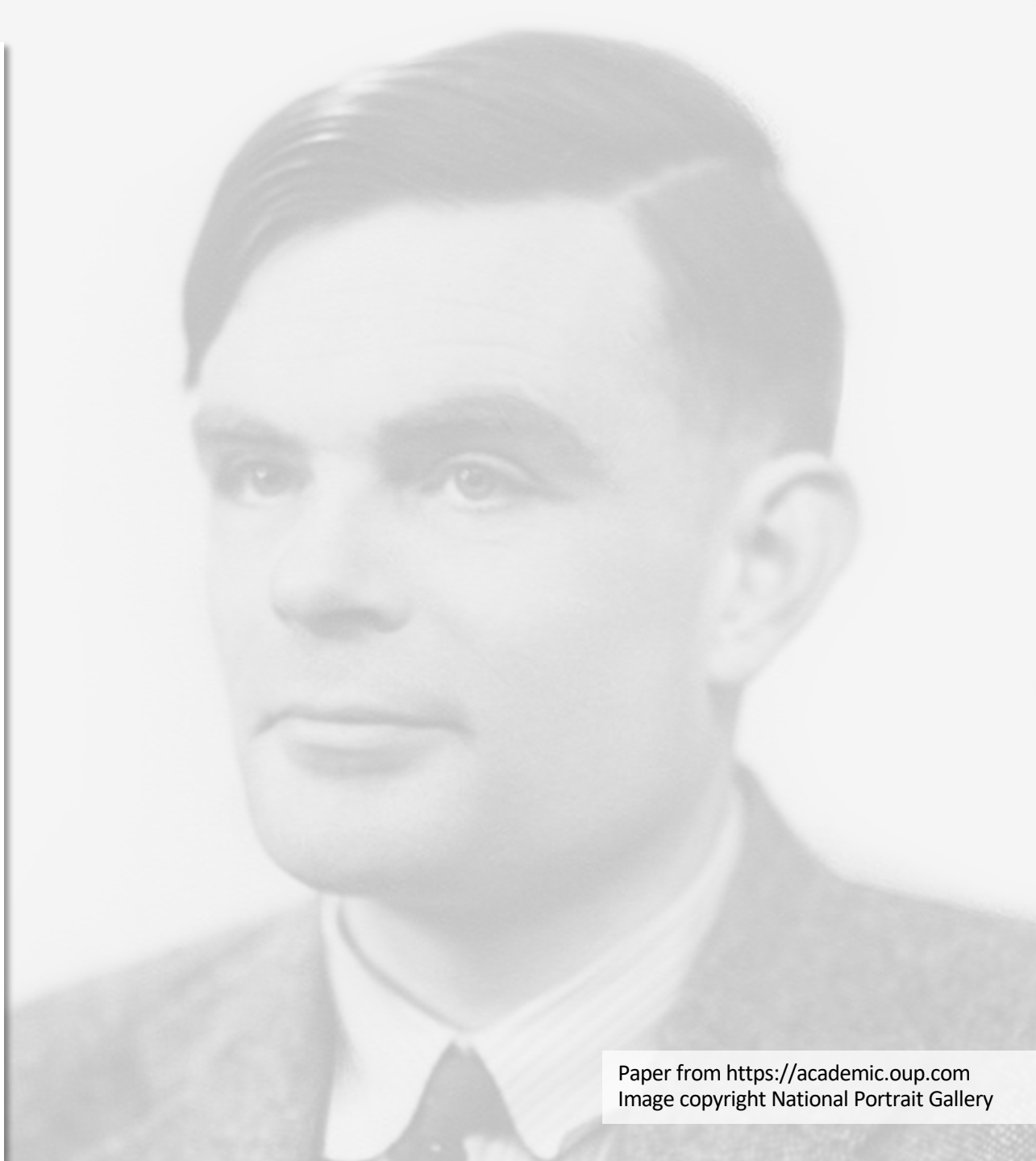
PSYCHOLOGY AND PHILOSOPHY

I.—COMPUTING MACHINERY AND INTELLIGENCE

BY A. M. TURING

1. *The Imitation Game.*

I PROPOSE to consider the question, 'Can machines think?' This should begin with definitions of the meaning of the terms 'machine' and 'think'. The definitions might be framed so as to reflect so far as possible the normal use of the words, but this attitude is dangerous. If the meaning of the words 'machine' and 'think' are to be found by examining how they are commonly used it is difficult to escape the conclusion that the meaning and the answer to the question, 'Can machines think?' is to be sought in a statistical survey such as a Gallup poll. But this is absurd. Instead of attempting such a definition I shall replace the



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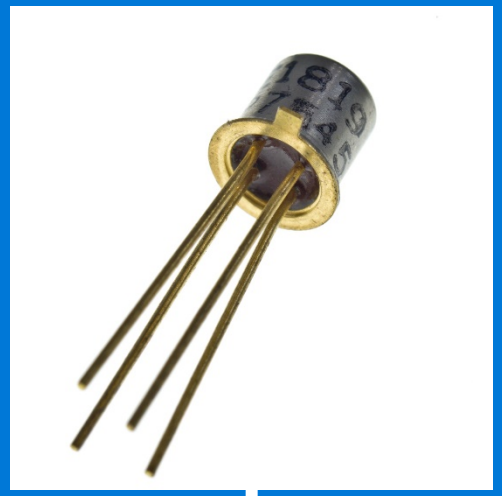

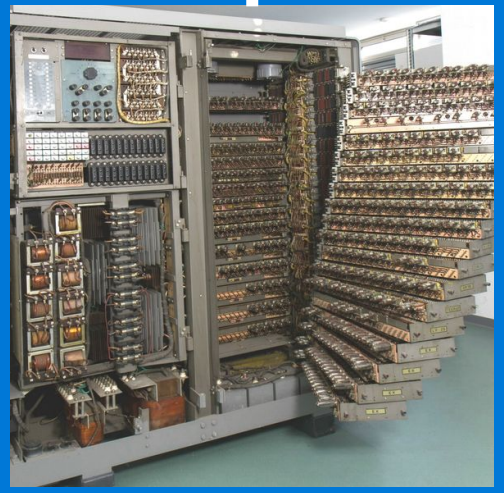

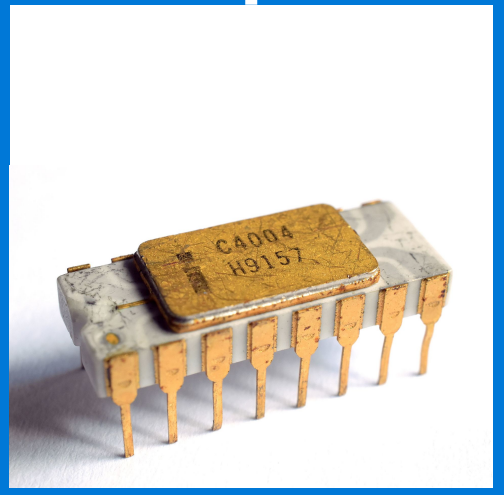
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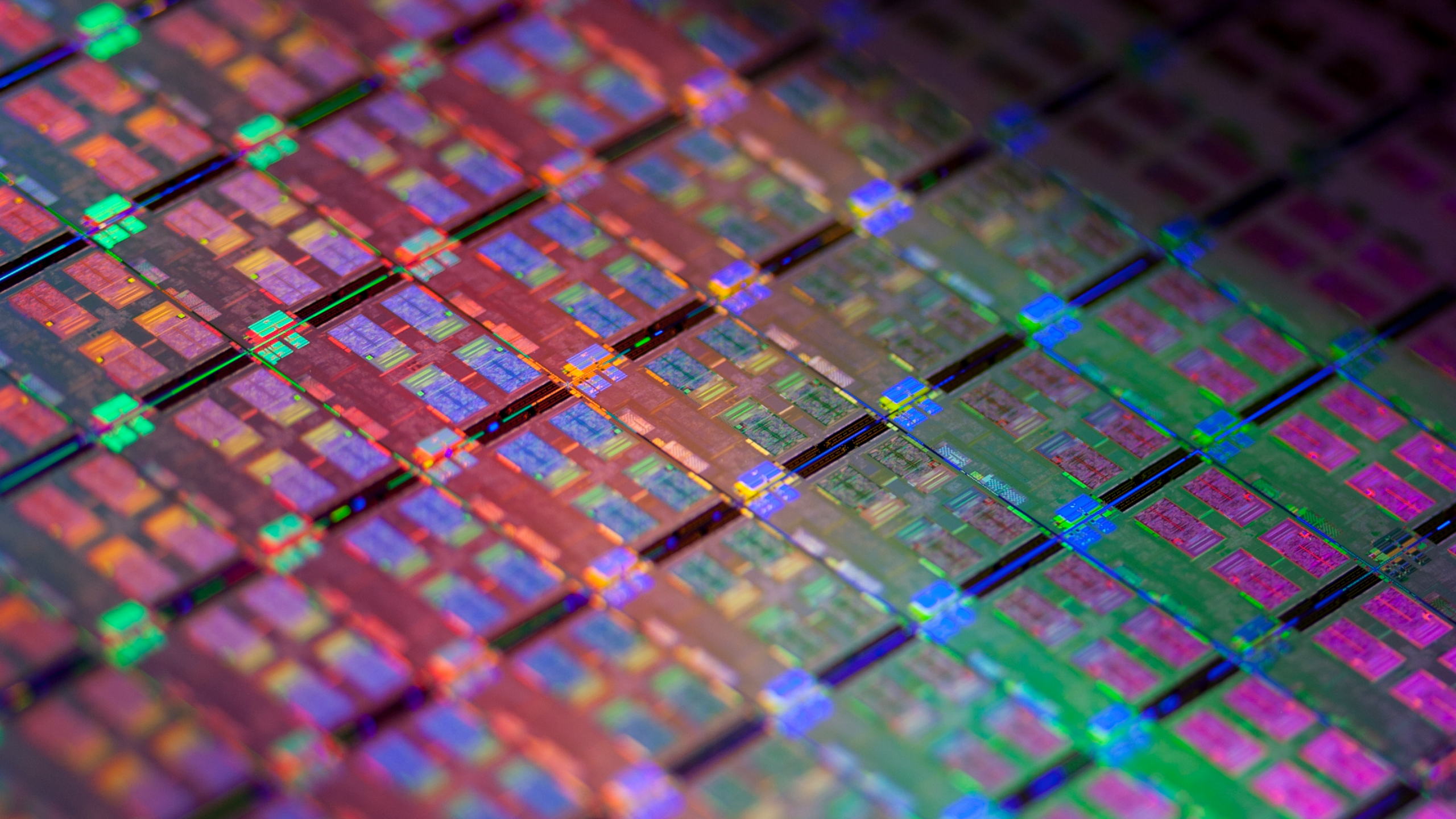

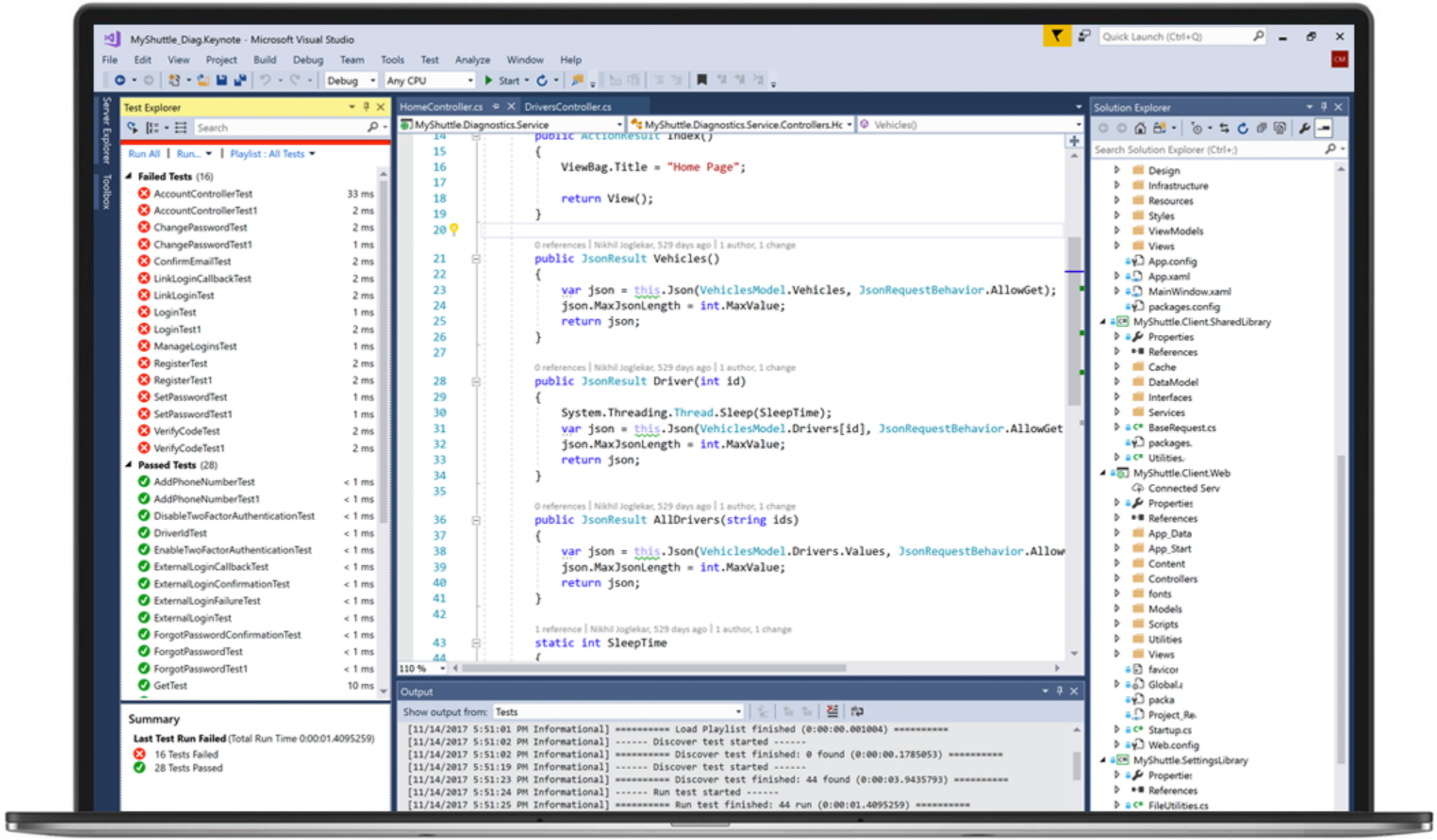
MyShuttle_Diag.Keynote - Microsoft Visual Studio
File Edit View Project Build Debug Team Tools Test Analyze Window Help
Debug
Any CPU
Start
Quick Launch (Ctrl+Q)
Test Explorer
Search
Run All | Run... | Playlist : All Tests
Failed Tests (16)
AccountControllerTest 33 ms
AccountControllerTest1 2 ms
ChangePasswordTest 2 ms
ChangePasswordTest1 1 ms
ConfirmEmailTest 2 ms
LinkLoginCallbackTest 2 ms
LinkLoginTest 2 ms
LoginTest 1 ms
LoginTest1 2 ms
ManageLoginsTest 1 ms
RegisterTest 2 ms
RegisterTest1 2 ms
SetPasswordTest 1 ms
SetPasswordTest1 1 ms
VerifyCodeTest 2 ms
VerifyCodeTest1 2 ms
Passed Tests (28)
AddPhoneNumberTest < 1 ms
AddPhoneNumberTest1 < 1 ms
DisableTwoFactorAuthenticationTest < 1 ms
DriverIdTest < 1 ms
EnableTwoFactorAuthenticationTest < 1 ms
ExternalLoginCallbackTest < 1 ms
ExternalLoginConfirmationTest < 1 ms
ExternalLoginFailureTest < 1 ms
ExternalLoginTest < 1 ms
ForgotPasswordConfirmationTest < 1 ms
ForgotPasswordTest < 1 ms
ForgotPasswordTest1 < 1 ms
GetTest 10 ms
Summary
Last Test Run Failed (Total Run Time 0:00:01.4095259)
16 Tests Failed
28 Tests Passed
HomeController.cs
DriversController.cs
MyShuttle.Diagnostics.Service
MyShuttle.Diagnostics.Service.Controllers.Hc
Vehicles()
public ActionResult Index()
{
ViewBag.Title = "Home Page";
return View();
}
0 references | Nikhil Joglekar, 529 days ago | 1 author, 1 change
public JsonResult Vehicles()
{
var json = this.Json(VehiclesModel.Vehicles, JsonRequestBehavior.AllowGet);
json.MaxJsonLength = int.MaxValue;
return json;
}
0 references | Nikhil Joglekar, 529 days ago | 1 author, 1 change
public JsonResult Driver(int id)
{
System.Threading.Thread.Sleep(SleepTime);
var json = this.Json(VehiclesModel.Drivers[id], JsonRequestBehavior.AllowGet
json.MaxJsonLength = int.MaxValue;
return json;
}
0 references | Nikhil Joglekar, 529 days ago | 1 author, 1 change
public JsonResult AllDrivers(string ids)
{
var json = this.Json(VehiclesModel.Drivers.Values, JsonRequestBehavior.Allow
json.MaxJsonLength = int.MaxValue;
return json;
}
1 reference | Nikhil Joglekar, 529 days ago | 1 author, 1 change
static int SleepTime
110 %
Output
Show output from: Tests
[11/14/2017 5:51:01 PM Informational] ========== Load Playlist finished (0:00:00.001004) ==========
[11/14/2017 5:51:02 PM Informational] ------ Discover test started ------
[11/14/2017 5:51:02 PM Informational] ========== Discover test finished: 0 found (0:00:00.1785053) ==========
[11/14/2017 5:51:19 PM Informational] ------ Discover test started ------
[11/14/2017 5:51:23 PM Informational] ========== Discover test finished: 44 found (0:00:03.9435793) ==========
[11/14/2017 5:51:24 PM Informational] ------ Run test started ------
[11/14/2017 5:51:25 PM Informational] ========== Run test finished: 44 run (0:00:01.4095259) ==========
Solution Explorer
Search Solution Explorer (Ctrl+;)
Design
Infrastructure
Resources
Styles
ViewModels
Views
App.config
App.xaml
MainWindow.xaml
packages.config
MyShuttle.Client.SharedLibrary
Properties
References
Cache
DataModel
Interfaces
Services
BaseRequest.cs
packages.
Utilities.
MyShuttle.Client.Web
Connected Serv
Properties
References
App_Data
App_Start
Content
Controllers
fonts
Models
Scripts
Utilities
Views
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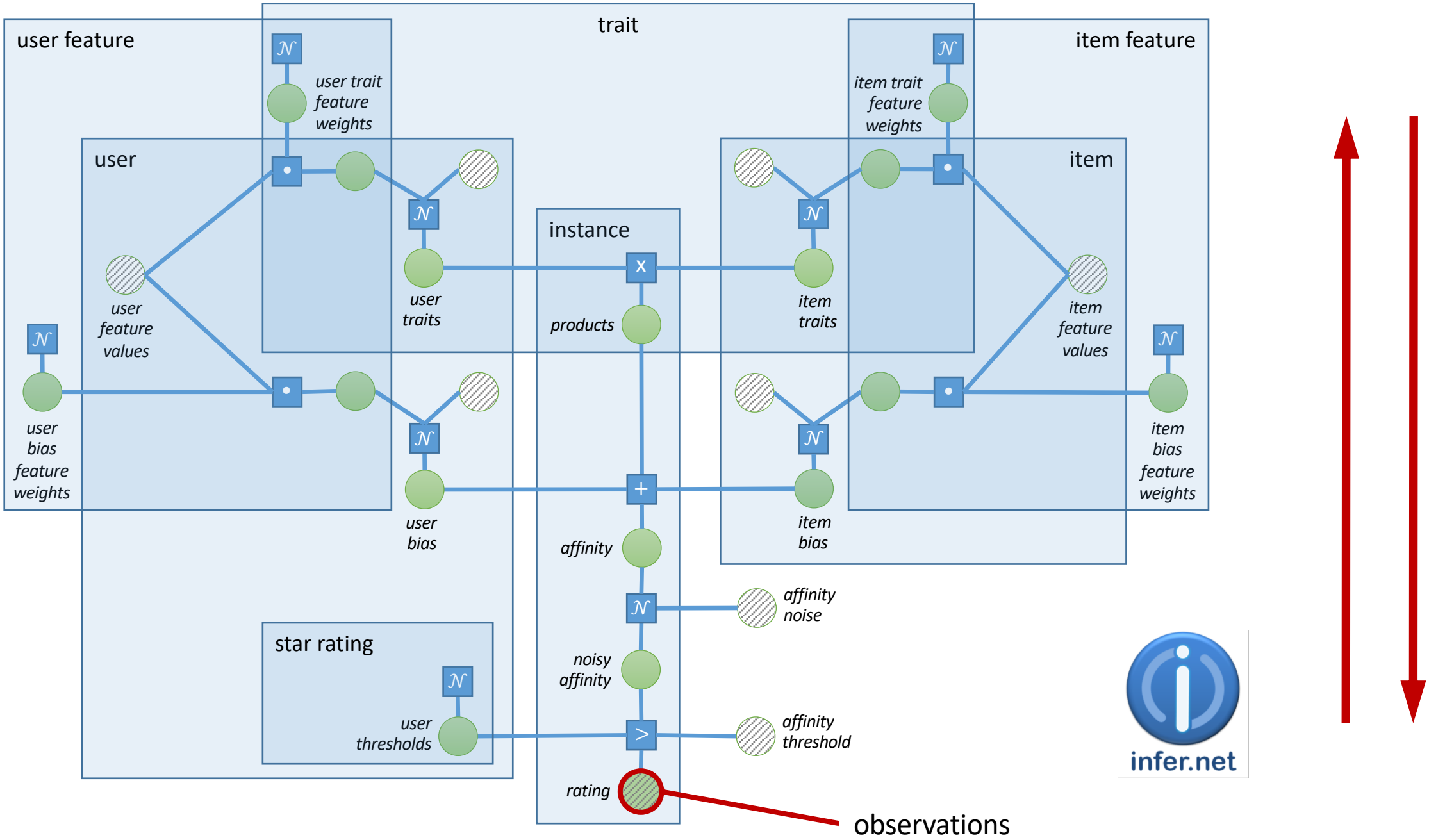
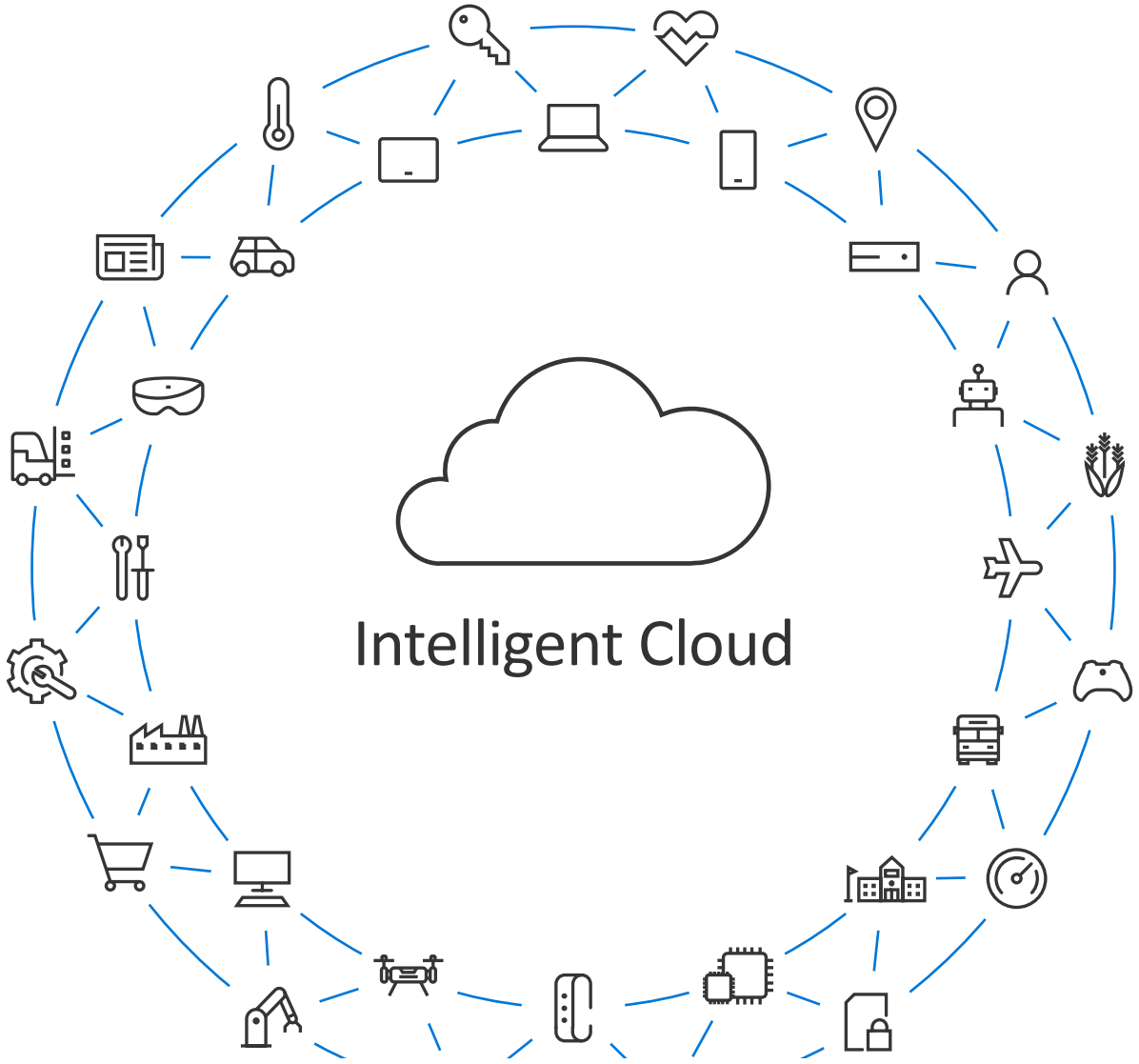
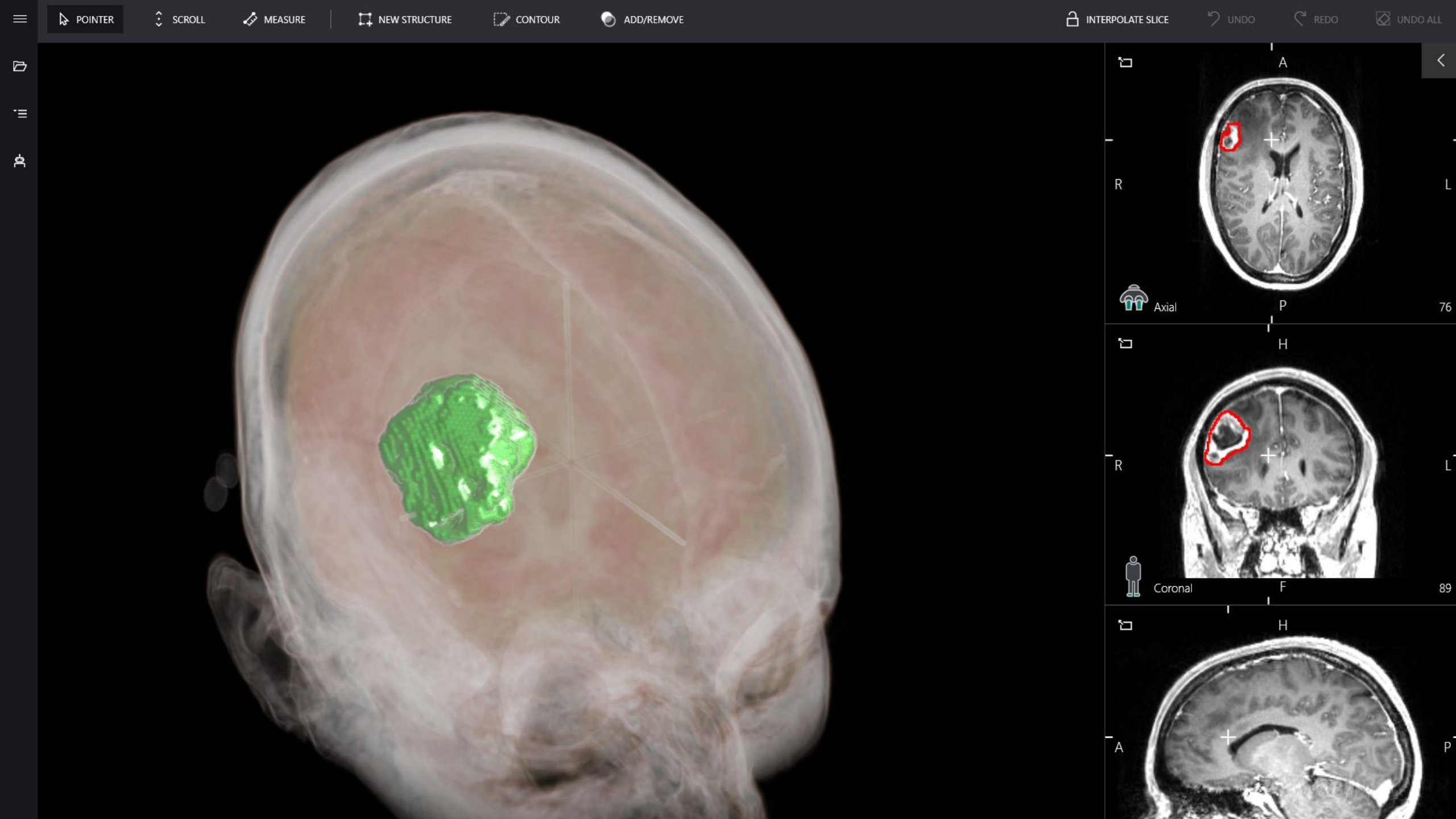
Global.
packa
Project_Re
Startup.cs
Web.config
MyShuttle.SettingsLibrary
Properties
References
FileUtilities.cs
Server Explorer
Toolbox


trait
user feature
item feature
user trait feature weights
item trait feature weights
user
item
instance
user feature values
user traits
item traits
item feature values
products
user bias feature weights
item bias feature weights
user bias
item bias
affinity
affinity noise
star rating
noisy affinity
user thresholds
affinity threshold
rating
observations
infer.net


Intelligent Cloud
Intelligent Edge

NHS


POINTER
SCROLL
MEASURE
NEW STRUCTURE
CONTOUR
ADD/REMOVE
INTERPOLATE SLICE
UNDO
REDO
UNDO ALL
A
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Axial
P
76
H
R
L
Coronal
F
89
H
A
P

Learning to decode the immune system to diagnose disease

Blood Sample

Immunosequencing

Machine Learning

Universal Diagnostic

Adaptive biotechnologies

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EYE WASH
STATION

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5

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Thank you